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THE HISTORY
OF THE
COLLECTIONS
CONTAINED IN THE
NATURAL HISTORY DEPARTMENTS
OF THE
BRITISH MUSEUM

VOL. I.

LIBRARIES.

THE DEPARTMENT OF BOTANY.

THE DEPARTMENT OF GEOLOGY.

THE DEPARTMENT OF MINERALS.

LONDON :

PRINTED BY ORDER OF THE TRUSTEES OF THE BRITISH MUSEUM

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P R E F A C E.



THE present history of the collections preserved in the four Natural History Departments of the British Museum has been produced at my suggestion, by the officers in charge of the collections. Mr. B. B. Woodward has written the history of the libraries; Mr. George Murray, assisted by Mr. Britten, that of the Department of Botany; Dr. Arthur Smith Woodward with valuable help from the late keeper, Dr. Henry Woodward, and from Dr. Bather, assistant keeper, that of the Department of Geology; and Mr. Fletcher that of the Department of Minerals. A second volume will contain the history of the collections in the Department of Zoology to which Mr. Edgar Smith, Dr. Bowdler Sharpe, Mr. C. O. Waterhouse, Mr. Boulenger, Mr. Oldfield Thomas, Mr. Jeffrey Bell, Mr. Pocock, Mr. Kirkpatrick, Sir George Hampson, and Mr. Lydekker, have each contributed a special section.

The possibility of producing such a history as the present is a remarkable evidence of the care and efficiency with which the records of the Museum have been kept during the past century. The value of the book to workers in the various branches of Natural History will be very great. It not only furnishes an interesting record of the names of hundreds who have contributed to build up our science during the nineteenth century, but it will prove to be of assistance to investigators who are anxious to discover the present depository of specimens or collections referred to in old publications and to compare them

with later samples. It will also furnish to a very large number of persons, who at present are not informed on the subject, a correct idea of the variety, extent, and importance of the immense series of collected specimens which are here, carefully guarded and kept in orderly arrangement, "not only" (according to the terms of Sir Hans Sloane's will) "for the inspection and entertainment of the learned and curious, but for the general use and benefit of the public to all posterity."

It furnishes documentary proof of the steady yet rapid progress of the scientific value of the Natural History Departments and of the care and accuracy with which the responsibilities undertaken by the Trustees have been discharged by their officers.

E. RAY LANKESTER.

March, 1904.

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INTRODUCTION.

THE British Museum dates its actual foundation from the year 1753, when an Act of Parliament was passed "for the purchase of the Museum or Collection of Sir Hans Sloane, and of the Harleian Collection of Manuscripts, and for providing One General Repository for the better Reception and more convenient Use of the said Collections and of the Cottonian Library and of the Additions thereto."

Sir Hans Sloane, an eminent physician in London, was for sixteen years President of the Royal College of Physicians and in 1727 succeeded Sir Isaac Newton in the Presidential Chair of the Royal Society. He was throughout his long life a diligent and miscellaneous collector, having, as stated in the Preamble of the Act of Incorporation of the Museum, "through the course of many years, with great labour and expense, gathered together whatever could be procured, either in our own or foreign countries, that was rare and curious." His collection, which at the time of his death in 1753 was contained in his residence, the Manor House, Chelsea, consisted of "books, drawings, manuscripts, prints, medals, and coins, ancient and modern antiquities, seals, cameos and intaglios, precious stones, agates, jaspers, vessels of agate and jasper, crystals, mathematical instruments, pictures, and other things," which latter included numerous zoological and geological specimens, and an extensive herbarium of dried plants preserved in 310 large folio volumes.

According to the terms of Sir Hans Sloane's will, this collection was purchased for the sum of £20,000—far below its intrinsic value—in order "that it might be preserved and

maintained, not only for the inspection and entertainment of the learned and the curious, but for the general use and benefit of the public to all posterity."

The valuable collection of manuscripts formed by Sir Robert Cotton at the end of the sixteenth and beginning of the seventeenth centuries was already the property of the nation, having been presented by his grandson, Sir John Cotton, in the year 1700. The Harleian Collection was obtained by purchase at the same time as the Sloanian, and the three were brought together under the designation of "the British Museum," placed under the care of a body of trustees,* and lodged in Montagu House, Bloomsbury, purchased for their reception in 1754. The Museum was opened to the public on the 15th of January, 1759. Admission to the galleries of antiquities and natural history was at first by ticket only, issued on application in writing, and limited to ten persons, for each of three hours in the day. Visitors were not allowed to inspect the cases at their leisure, but were conducted through the galleries by officers of the house. The hours of admission were subsequently extended; but it was not until the year 1810 that the Museum was freely accessible to the general public for three days in the week, from ten to four o'clock. The present daily opening, with longer hours in summer, dates only from 1879.

At the time of the foundation of the Museum, the site allotted seemed amply sufficient for its purposes; but gradually, as the collections of all kinds increased, they outgrew the limits, not only of the original Montagu House, but even of its successor, the present classical building, completed in 1845 from the designs of Sir Robert Smirke. The erection of the magnificent reading-room in 1857 disposed for a time of the difficulty of

* The Trustees under the Act of Incorporation were the Archbishop of Canterbury, the Lord Chancellor, the Speaker of the House of Commons, the Bishop of London, and the principal Officers of State for the time being; six representatives of Founders' families; the Presidents of the Royal Society and College of Physicians; and fifteen other Trustees to be elected by them. Subsequently, the Presidents of the Society of Antiquaries and of the Royal Academy of Arts, a Trustee by special nomination of the Sovereign, and three more family Trustees were added to the Board.

finding accommodation for the ever-growing library; but the keepers of other departments continued urgent in their demands for more space, and after much discussion of rival plans for keeping the collections together and obtaining the needful extension of room by acquiring the property immediately around the old Museum, or for severing the collections and removing a portion to another building, the latter course was finally decided upon. At a special general meeting of the Trustees, held on the 21st of January, 1860, attended by many members of the Government in their official capacity, a resolution, moved by the First Lord of the Treasury, was carried: "That it is expedient that the Natural History Collection be removed from the British Museum, inasmuch as such an arrangement would be attended with considerably less expense than would be incurred by providing a sufficient additional space in immediate contiguity to the present building of the British Museum."

The House of Commons, in the Session of 1863, sanctioned the purchase of part of the site of the International Exhibition of 1862 at South Kensington, with a view to appropriating it to the purpose of a Museum of Natural History.

In January, 1864, the Commissioners of Her Majesty's Works issued an advertisement for designs for a Natural History Museum and a Patent Museum, to be erected on part of the land thus acquired, a plan which had been prepared by Mr. Hunt in September, 1862, from Sir Richard Owen's suggestions, being proposed as a model in respect to dimensions and internal arrangement.

The plans of the various competitors were submitted to Her Majesty's Commissioners of Works, who awarded prizes to three of the number, giving precedence to that of Captain Francis Fowke, R.E., and then referred the three premiated plans to the Trustees of the British Museum. As the internal arrangements in Captain Fowke's plan did not meet with the approval of the Museum officers, he was desired to modify them in conformity with the requirements of the Trustees. He was engaged in this labour when his death occurred, in September, 1865.

Early in the year 1866, Mr. Alfred Waterhouse was invited by

the Chief Commissioner of Works to take up the unfinished work of Captain Fowke; but he found himself unable to complete the plan to his own satisfaction, and in February, 1868, he was commissioned to form a fresh design, embodying the requirements of the officers of the Natural History Departments of the Museum.

Mr. Waterhouse was not long in submitting to the Trustees his plan and model of the building, with a disposition of galleries as required, and these were formally accepted by the Trustees in April, 1868. It was not, however, until February, 1871, that the working plans had been thoroughly considered, and received the final approval of the Trustees.

The actual work of erection was commenced in the year 1873, and the building was handed over to the Trustees of the British Museum by Her Majesty's Commissioner of Works in the month of June, 1880. Immediately that the exhibition cases were completed, and the galleries were sufficiently dry to receive the collections, the great labour of removing the Natural History Collection from Bloomsbury was commenced. The departments of Geology, Mineralogy, and Botany were arranged in their respective sections of the Museum in the course of the year 1880, and the portion of the Museum which contained these departments was first opened to the public on April 18th, 1881. It was not until the following year that the cases destined to receive the larger collections of the Zoological Department were sufficiently near completion to allow of these collections following, and three more years were required before all the rooms could be brought into a state fitted for public inspection.

The original collections of the Natural History Departments of the British Museum are, as stated above, those of Sir Hans Sloane. The addition to these of the collections of Sir Joseph Banks (1827), and the long continuous accession of new collections during 150 years, some purchased and many presented by naturalists whose names are historical as authorities and benefactors of science—has rendered the Museum at the present day the richest and most important in the world. The gradual development of the separate departments of Botany, Geology,

Mineralogy, and Zoology is narrated in the work now produced by the combined authorship of the various responsible officers of the Museum. The history given is not merely a general one but forms an important record of the smaller as well as the larger collections which have been absorbed into the great series. Each section of the work devoted to one of the four Departments as at present constituted, viz. : Botany, Geology, Mineralogy, and Zoology, commences with a general sketch of the history of the Department. This is followed by a chronological account of the yearly additions to its collections up to (and in some instances beyond) the year 1900, and further by an alphabetical list of donors or of previous owners of collections now embodied in those of the Department which have importance either because they contain type-specimens or because of the scientific or historical associations of the name cited. In treating of the Department of Zoology it has been found convenient on account of the great size and variety of the collections to break up the account into a number of separate sections, each describing, according to the plan above explained, the collections representing a separate class or section of the Animal Kingdom.

The genesis of these several existing Departments and the succession of their administrators are briefly as follows:—

The first appointments of Officers to the newly-constituted Museum were made in 1756, when Dr. Gowin Knight was chosen as Principal Librarian, with three Keepers under him, viz: Dr. M. Maty for the Printed Books, Dr. C. Morton for the Manuscripts, and Mr. James Empson for the remaining collections, entitled "Natural History Department." This Department, however, included all the Antiquities, Coins, and Medals. Empson had as his successive Assistant Keepers: H. Rimius (died 1757), W. Hudson (retired 1758), and the Rev. A. J. Planta (transferred to Printed Books, 1765). On Empson's death in 1765, Maty was transferred from the Keepership of the Department of Books to that of the Department of Natural History, his Assistant Keeper being the celebrated Dr. Solander, who had already been employed in the work of cataloguing from 1763. Solander in 1768 obtained permission, on finding a sub-

stitute, to accompany Banks on the now famous voyage with Captain Cook. He returned in 1771, and, Maty becoming Principal Librarian in 1772, Solander was made Keeper of the Natural History Department in 1773. At the same time, J. O. Justamond was appointed Assistant Keeper, and was joined in that office in 1776 by the Rev. P. H. Maty; E. W. Gray succeeded Justamond in 1778. E. W. Gray was uncle of Samuel Frederick Gray, the Chemist, whose son John Edward Gray joined the Museum staff in 1824 and became one of the most prominent systematists of his time.

On Solander's death in 1782, P. H. Maty succeeded to the Keepership, and the Rev. C. G. Woide to the vacant Assistant Keepership. When P. H. Maty died in 1787, E. W. Gray was appointed to the Keepership, and in 1791 the well-known naturalist, G. Shaw, became Assistant Keeper.

In 1803 Taylor Combe was made an Assistant Keeper, with charge of the Antiquities and Coins.

E. W. Gray died in 1806, and the following year the first important change was made, the old department being divided into the "Department of Natural History and Modern Curiosities," with G. Shaw for Keeper, and the "Department of Antiquities and Coins," of which T. Combe was made Keeper. Chas. König was added to the staff of the former as Assistant Keeper in the same year, and became Keeper in 1813 on Shaw's death.

W. E. Leach was made Assistant Keeper in 1813, but retired in 1822, and was succeeded in 1823 by J. G. Children, transferred from the Department of Antiquities, which he had joined in 1816. The department was further strengthened by the addition of J. E. Gray in 1824, G. R. Gray in 1831, and Adam White in 1835.

In 1827 the Banksian Herbarium was transferred to the custody of the Trustees, Robert Brown, its former custodian, being created "Keeper of Sir Joseph Banks' Botanical Collection." By the addition to this in 1835 of the Sloane Herbarium and other botanical collections in the charge of the Natural History Department, a "Botanical Branch" was formed.

A further and most important change in the constitution of the Department was introduced in 1837 by the formation of two other Branches, the "Mineralogical and Geological Branch," under the Keepership of C. König, and the "Zoological Branch," or which J. G. Children was promoted to be Keeper.

König was succeeded in 1851 by G. R. Waterhouse, and Children in 1840 by J. E. Gray.

The administration of the Department was greatly changed in 1856, by the appointment of Professor (afterwards Sir Richard) Owen as "Superintendent," and the conversion of the "Branches" into "Departments." The single "Natural History Department" thus became three distinct Departments, viz. : 1, Botanical ; 2, Zoological ; 3, Mineralogical and Geological.

In 1857 the "Mineralogical and Geological Department" was divided into the "Geological Department," under the former Keeper, G. R. Waterhouse, and the "Mineralogical Department," to which Prof. Story-Maskelyne was appointed as Keeper.

Subsequent changes were mainly in the *personnel* of the staff, and were as follows :—

On the retirement of Sir Richard Owen in 1884, he was succeeded by Prof. (afterwards Sir William) Flower, with the title of Director, and in 1898, on the retirement of the latter, by the present Director.

The succeeding Keepers have been :—

Botanical Department : J. J. Bennett (1859), W. Carruthers (1871), and G. R. M. Murray (1895).

Geological Department : H. Woodward (1880), and A. S. Woodward (1901).

Mineralogical Department : L. Fletcher (1880).

Zoological Department : A. Günther (1875). Since 1895, the Director for the time being has been the Acting-Keeper of Zoology.

CHRONOLOGICAL LIST OF OFFICERS, ASSISTANTS AND OTHERS CONNECTED WITH THE NATURAL HISTORY DEPARTMENTS.

* * The initial prefixed to the name indicates in which division of the establishment the individual served—**B**, **G**, **M** and **Z** standing for the several departments, **O** for the "Director's Office," and **L** for the "General Library."
 "ret" = retired. "†" is prefixed to the date of death.

	ASSISTANTS.	ASSISTANT KEEPERS.	KEEPERS.	PRINCIPAL LIBRARIAN.
1756		Rimius, H. [†1757]	Empson, J. [†1765]	Knight, G. [†1772]
1757 1758		Hudson, W. [ret. 1758] Planta, Rev. A. J. [transf. to Printed Books, 1765]		
1763 1765	Solander, D.	Solander, D.	Maty, Matt. [transf. from Printed Books]	Maty, M. [†1776]
1772 1773		Justamond, J. O. [dis- missed, 1778]	Solander, D. [†1782]	
1776		Maty, Rev. P. H.		Morton, C. [†1799]
1778 1782		Gray, E. W. Woide, Rev. C. G. [transf. to Printed Books]	Maty, Rev. P. H. [†1787]	
1787 1791 1799 1803		Shaw, G. Combe, T. [Keeper of Antiq. in 1807]	Gray, E. W. [†1806]	Planta, J. [†1827]
1807. Antiquities and Coins were formed into a separate Department.				
1807 1813 1821	Samouelle, G. [? ret. c. 1841]	König, C. Leach, W. E. [ret. 1822]	Shaw, G. [†1813] König, C. [†1851]	
1823		Children, J. G. [transf. from Antiq. Dept., 1816-22]		
1824 1827	Gray, J. E. (B) Bennett, J. J.		(B) Brown, Robt. [†1858]	Ellis, H. [ret. 1856]
1831 1835	(Z) Gray, G. R. (Z) White, A. [ret. 1863]			

1835. The "Botanical Branch" was formed by the transfer of the custody of the Sloane Herbarium and other botanical collections to the custody of the "Keeper of Sir Joseph Banks' Botanical Collections."

1837. The rest of the Department was sub-divided into the "Mineralogical and Geological Branch" and the "Zoological Branch."

	ASSISTANTS.	ASSISTANT KEEPERS.	KEEPERS.	SUPERINTEN- DENT.	PRINCIPAL LIBRARIAN.
837			(Z) Children, J. G. [ret. 1840]		
838	(G) Richardson, G. F. [†1848]				
839	(Z) Cooper, D. [super- num. ret. 1840-1]				
840			(Z) Gray, J. E. [ret. 1874]		
841	(Z) Baird, W. [†1872]				
842	(Z) Doubleday, E. [†1849]				
843	(G) Waterhouse, G. R.				
848	(G) Woodward, S. P. [†1865]				
850	(Z) Smith, F.				
851			(G) Waterhouse, G. R. [ret. 1880]		
856	(G) Sharman, R. [super- num., ret. 1857]			Owen, R. [ret. 1884]	Pauizzi, A. [ret. 1866]
<p>Coincident with the appointment of the Superintendent the several "Branches" were turned into "Departments." In 1857 the "Mineralogical and Geological Department" was sub-divided into the "Geological" and "Mineralogical" Departments.</p>					
857			(M) Maskelyne, M. H. N. Story- [ret. 1880]		
858	(G) Woodward, H.				
859	(B) Carruthers, W.		(B) Bennet, J. J. [ret. 1871]		
862	(Z) Günther, A. C. L. G.				
—	(M) Lang, V. von [ret. 1864]				
—	(M) Davies, T. [first joined establishment 1858. †1892]				
863	(Z) Butler, A. G.				
—	O'Shaughnessy, A. W. E. [first joined establish- ment in 1861 (Printed Books), was attached to the Z. D. in 1863, to G. D. in 1864, and to the Superintendent from 1865. †1881]				
866	(Z) Waterhouse, C. O.				Jones, J. W. [ret. 1878]
867	(Z) Smith, E. A.				
—	(G) Bennett, L. D. [ret. 1869]				
—	(M) Flight, W. [ret. 1885]				
869	(B) Trimen, H. [ret. 1879]				

	ASSISTANTS.	ASSISTANT KEEPERS.	KEEPERS.	PRINCIPAL LIBRARIAN.
1869	(G) Kent, W. Saville [ret. 1873]			
—		(Z) Gray, G. R. [†1872]		
1871	(B) Britten, J.		(B) Carruthers, W. [ret. 1895]	
1872	(G) Gordon, G. D. H. [ret. 1875]			
—	(Z) Miers, E. J. [ret. 1885]			
—	(Z) Sharpe, R. B.	(Z) Günther, A. C. L. G.		
1875	(M) Lewis, W. J. [ret. 1877]	(Z) Smith, F. [†1879]	(Z) Günther, A. C. L. G. [ret. 1895]	
—	(G) Davies, W. [first joined establishment 1843, ret. 1887]			
1876	(B) Murray, G. R. M.			
1878	(Z) Thomas, M. R. O. [in office 1876-78]			Bond, E. A. [ret. 1888]
—	(M) Fletcher, L.			
—	(Z) Ridley, S. O. [ret. 1887]			
—	(Z) Bell, F. J.			
—	(G) Etheridge, R. J. [ret. 1887].			
1879	(Z) Kirby, W. F.	(Z) Butler, A. G. [ret. 1901]		
1880	(B) Ridley, H. N. [ret. 1888]	(O) Taylor, J. T. (Assist.-Secretary, transferred from Office, B. M. , to which he returned in 1884.)	(G) Woodward, H. [ret. 1901] (M) Fletcher, L.	
—	(G) Newton, R. B.			
—	(B) Fawcett, W. [ret. 1886]			
—	(M) Platnauer, H. M. [ret. 1883]			
1881	(O) Fagan, C. E. [Office, B. M. 1873-81]			
—	(O) Isaac, J. F. [Clerk]			
—	(L) Woodward, B. B. [Printed Books 1876- 81]			
—		(G) Etheridge, R. [ret. 1891]		
1882	(Z) Quelch, J. J. [ret. 1886]			
—	(Z) Grant, W. R. Ogilvie			
—	(Z) Boulenger, G. A.			
—	(G) Woodward, A. S.			
—	(M) Miers, H. A. [ret. 1895]			

	ASSISTANTS.	ASSISTANT KEEPERS.	KEEPERS.	DIRECTOR.	PRINCIPAL LIBRARIAN.
1884		(O) Nichols, T. N. (Assistant - Secretary) [ret. 1889]		Flower, W. H. [ret. 1898]	
1885	(Z) Pocock, R. I. [ret. 1904]				
—	(O) Holl, W. H. R. [Clerk]				
1886	(B) Gepp, A.				
—	(G) Crick, G. C.				
—	(Z) Gahan, C. J.				
—	(Z) Kirkpatrick, R.				
1887	(M) Prior, G. T.				
—	(Z) Dendy, A. [ret. 1887]				
—	(B) Baker, E. G.				
—	(G) Bather, F. A.				
—	(G) Gregory, J. W. [ret. 1900]				
1888	(B) Rendle, A. B.				Thompson, E. M.
1889	(Z) Heron, F. A.	(O) Fagan, C. E. (Assistant - Secretary)			
—	(Z) Austen, E. E.				
1892	(G) Andrews, C. W.	(G) Woodward, A. S.			
—	(O) Anderson, W. J. [Clerk]				
1894	(M) Spencer, L. J.				
1895		(Z) Smith, E. A.	(B) Murray, G. R. M.		
—	(Z) Hampson, G.	(Z) Sharpe, R. B.	(Z) Flower, Sir W. H. (Acting Keeper) [ret. 1898]		
1896	(B) Blackman, V. H.				
—	(Z) Arrow, G. J.				
1897	(M) Smith, G. F. H.				
1898			(Z) Lankester, E. R. (Acting Keeper)	Lankester, E. R.	
1901	(Z) Regan, C. T.		(G) Woodward, A. S.		
1902	(G) Lang, W. D.	(G) Bather, F. A.			

8

THE LIBRARIES.

THE LIBRARIES.

1. GENERAL SKETCH OF THE SEVERAL LIBRARIES IN THE BRITISH MUSEUM (NATURAL HISTORY), WITH SOME ACCOUNT OF THEIR FORMATION AND PROGRESS, FROM 1753 TO THE END OF 1900.

THE various Books, MSS., Drawings, and Maps in the Natural History Section of the British Museum are distributed as follows:—

1. GENERAL LIBRARY (L.)*:—Comprising works treating of subjects common to two or more of the Departments, and hence mainly consisting of the publications of Scientific Societies, Academies, and such like Corporate Bodies, of Scientific Magazines, and of Works of Travel.

Topographical Maps of all countries, the Admiralty Charts and the sheets of the Ordnance Survey [Scale 1 in. = 1 m.] are also kept there.

Attached to the General Library are the Owen Collection of Drawings of zoological and palæontological specimens, and some MSS., including a collection, in course of formation, of the autographs of Naturalists, formed for the purpose of the identification of handwriting on labels, etc.,† and a collection of Photographs of Natural History objects and Museums. These drawings and photographs have not yet been arranged or catalogued.

2. BOTANICAL DEPARTMENT LIBRARY (B.)*:—Comprising such serial publications and separate works as deal with Botany (pure

* In the following pages, to avoid constant repetition, the letters L, B, G, M, Z, already in use in the Library, are used for the purpose of distinguishing the several libraries.

† A representative selection of the large and valuable collection of autographs of Naturalists formed by Mr. C. Davies Sherborn has been generously made available by him for purposes of consultation by the officers and students in the Museum, and has constantly proved most useful.

and applied), and a few on Palæobotany, besides a large number of valuable MSS., mostly from the Banksian Library.

An extensive general collection of original drawings and of engravings of specimens of Plants arranged in separate series, supplementing the Herbarium; while there are besides many distinct collections of valuable drawings.

A good collection of autographs of Naturalists, principally Botanists, has also been brought together for the purpose of identifying handwritings.

3. GEOLOGICAL DEPARTMENT LIBRARY (G.)*:—Embracing those serial publications and separate works that have to do with Geology and Palæontology.

There is a small collection of MSS. and of prints and drawings of specimens of Fossils, the latter not yet catalogued.

An extensive series of the geological maps and sections of all countries is also included in this library.

4. MINERALOGICAL DEPARTMENT LIBRARY (M.)*:—In addition to serial publications and separate works more immediately connected with Mineralogy, Crystallography, and Petrology, there is a small collection of mineralogical (with a few geological) maps.

5. ZOOLOGICAL DEPARTMENT LIBRARY (Z.)*:—Comprising serial publications and separate works on Zoology, with a few on Palæozoology.

Some of these are kept in the rooms of the various Assistants.

Attached to this library is the Tweeddale Library of Ornithological works, which is located in the Bird Room, and there is also a collection of works on Economic Zoology.

There are some valuable MSS. and a large series of drawings of zoological specimens, but there is no systematic collection of them as in the Botanical Department. A collection of photographs of specimens of animals is, however, in course of formation.

This distribution has not in all cases been strictly adhered to, and some works of a general character are to be found in each of

* For explanation of these letters, see p. 1, *ante*.

the departmental libraries. There is also a certain amount of duplication due for the most part to the need for working copies of some books.

The several departmental libraries are under the charge of the respective Keepers of the Departments, who usually relegate the task of immediate superintendence to one or other of their Assistants, an Attendant being told off in each case to perform the routine work.

The General Library when first formed in 1881 was governed by a Committee of the four Keepers of Departments, the Assistant in charge, Mr. B. B. Woodward, who was appointed in October of that year, reporting in the first instance (October, 1881 to June, 1883) to the Keeper of Botany, subsequently (July, 1883 to April, 1884) to the Keeper of Zoology, and since May, 1884, to the Director, who from that time took over the control of this library.

In February, 1888, it was resolved that a general alphabetical Authors' Catalogue of the whole library of the Museum, exclusive of minor separata, should be printed. With the aid of temporary assistance the cataloguing on a uniform system of all the libraries was thereupon begun, and, by 1897, so far completed that a grant for printing was obtained. The first sheet of this Catalogue was passed for press in January, 1898, and, by the end of 1900, sixty-six sheets (A-Endea.) had been printed off.*

2. CHRONOLOGICAL ACCOUNT OF THE PRINCIPAL ACCESSIONS TO THE END OF 1900.

1753.

When Sir Hans Sloane's Collections became the property of the nation in 1753 his manuscript catalogues of them, the copy of his "Voyage to the Islands Madera, Barbados . . . and Jamaica," etc., annotated in his own handwriting, with the original drawings of the specimens of Plants from which the plates were drawn, and a copy of Ray's "Historia Plantarum," which he had used in connection with his Herbarium, were kept with his collections instead of being incorporated with the

* The first volume, A-D, was issued in August, 1903.

Library, and so may be held in some sense to have constituted the nucleus of the present collection of works on Natural History. Some volumes formerly in Sloane's library were transferred at later dates; as were also some from Baron von Moll's library, which was acquired in 1815.

1818.

Z.* J. Abbot's original water-colour drawings of the Insects and Plants of Georgia, with manuscript descriptions, comprised in 17 volumes, formerly in the possession of J. Francillon, was purchased.

1827.

B. The first approximation towards the formation of a departmental library was in 1827, when the collections and library of Sir Joseph Banks were transferred to the Trustees, it being agreed that the Keeper of the Banksian Botanical Collections should also have exclusive care and management of the manuscripts, with the drawings and copper-plates engraved.

Under this agreement 149 volumes, chiefly systematic works used in the herbarium, that were either duplicates, or had manuscript notes in them, remained in what is now the Department of Botany with the Banksian collections of MSS. and Drawings.† Some other duplicate volumes from this Library, which forms an item of the Printed Books Department, were transferred at later dates to other of the Natural History departments.

1835.

Z. The collection of drawings formed by Major-General T. Hardwicke were bequeathed with his collections in 1835, but remained in charge of the MSS. Department till the removal of the Zoological Collections to South Kensington, when they were transferred to the Zoological Department.‡

B. His botanical MSS. and drawings, however, were placed at once with the Banksian Botanical Collection.

1841.

B. An important collection of water-colour drawings of Plants, by Franz A. Bauer, "being that part of Mr. Bauer's

* For explanation of these initials, see p. 1, *ante*.

† For an enumeration of these, see pp. 23-26.

drawings made at the expense of the late Sir Joseph Banks, baronet, which did not accompany his Library and Botanical Collections when transferred to the Museum, but was bequeathed by Sir Joseph to his late Majesty King George the Fourth," was presented by her late Majesty Queen Victoria.

Z. A copy of Cramer's "Papillons exotiques," which belonged to Henry Seymer, of Handford, Dorsetshire, who had added the Linnean names and re-touched several of the coloured plates, was presented by A. B. Lambert.

1842.

In this year the first systematic purchases of works for the departmental libraries appear to have been made.

B. The autograph journal of H. Ruiz Lopez, kept during the botanical exploration of Peru and Chili made by him in company with J. Pavon (1777-83), his important manuscripts "Sobre Quina" with other autographs, and their joint original descriptions of the Plants met with, were purchased at the sale of A. B. Lambert's library.

Z. The first book recorded as purchased by the Zoological Department was H. Milne Edwards' "Histoire naturelle des Crustacés."

1843.

B. and **Z.** The original water-colour drawings made by Ferdinand L. Bauer, the artist who accompanied Flinders on his "Voyage to Terra Australis" in 1801-3, comprising 202 drawings of Plants and 49 of Animals,* were presented.

1845.

In the estimates for 1845 there appears for the first time a sum of money definitely allotted for the purchase of books for a departmental library, that of Mineralogy, which then included the present Departments of Geology and of Mineralogy. The following year it is reported that "the books purchased . . . have all been catalogued and bound with a distinctive ornamental mark on each volume." This grant was annually renewed.

Among other accessions for the year were :—

Z. 670 foll. of water-colour drawings by native artists of the

* Not transferred from **B** to **Z** till 1887.

Vertebrata of Nepaul, presented by their collector, B. H. Hodgson, who added a further large series in 1858.

67 original water-colour drawings of Vertebrata from King George's Sound and its neighbourhood, with MS. notes by the draughtsman and donor, J. Neill.

1847.

B. 248 original water-colour drawings of Plants of British Guiana, by Sir R. H. Schomburgk, were presented in part by the Secretary of State for the Colonies, and in part by Sir R. H. Schomburgk himself.

Z. Received the first annual grant for the purchase of books.

1848.

B. Received its first annual grant for the purchase of books.

A collection of 30 water-colour drawings by a native artist of Chinese Plants, Birds, and Fish was acquired. The 16 drawings of Plants were incorporated with a similar set in the Banksian Collection (MS. No. 12), and the 11 drawings of Birds and 3 of Fish transferred to the Zoological Department and incorporated in the Banksian MS., No. 11.

1853.

Z. Gronovius' MS., containing the descriptions and illustrations of his Collection of Fish, was purchased with his collection at an auction in London. It was printed and issued as a Museum publication in 1854.

1858.

The "Mineralogical Department" was divided into the "Geological" and "Mineralogical" departments, and the library shared between them.

B. A number of drawings by Ferdinand L. Bauer were bequeathed by Robert Brown.

Z. A further series of water-colour drawings by native artists of the Vertebrata of Nepaul was presented by the collector, B. H. Hodgson, making with those presented in 1845 a total of 1,319 drawings, which have been mounted and bound in 8 volumes.

1859.

B. The collection of more than 2,500 original water-colour drawings by James Sowerby for the illustrations to his "English Botany" were purchased with his herbarium. These have been mounted on sheets, beside copies of the finished plates from the first and third editions.

1861.

B. The unpublished autograph Journals kept by L. A. Deschamps during his voyage as naturalist on *La Recherche*, under Entrecasteaux, and during his subsequent travels in Java, with materials for a Flora Javanica, water-colour sketches, and other notes and memoranda, as well as 111 water-colour drawings of specimens of Java Plants, made by, or for Dr. F. Noronha, were presented by J. R. Reeves.

Z. Deschamps' original sketches and autograph descriptions of the Mammalia of Java, presented with the foregoing.

89 volumes of zoological works and pamphlets, including manuscript notes by C. R. Darwin and T. Bell on the Reptiles and Amphibia collected during the voyage of the *Beagle*, were presented by Dr. J. E. Gray, at that time Keeper of the Department.

1862.

B. A set of original water-colour drawings by James De Carle Sowerby and J. W. Salter for the illustrations to vol. i.-iv. of the Supplement to James Sowerby's "English Botany" were purchased, and incorporated with those for the main work that had been acquired in 1859.

1863.

Z. An autograph MS. of the Rev. W. Kirby, the entomologist, entitled, "Musæum Entomologicum Barhamense. Pars prima," was presented by the Entomological Society.

1865.

B. The botanical drawings and MSS. of R. A. Salisbury were presented by Dr. J. E. Gray.

1866.

B. 29 sheets of original drawings by James De Carle Sowerby, from which the illustrations to Dawson Turner's "Musculologia Hibernicæ Spicilegium" were engraved, were purchased.

1867-68.

G. The collection of drawings formed by Hugh Falconer in connection with his "Fauna Antiqua Sivalensis," and other writings on Indian Palæontology, was presented. It included sketches for 20 unpublished plates to the "Fauna," sketches for 18 plates of Ruminant remains, with manuscript explanations, and more than 220 drawings in water-colour, pen-and-ink, and pencil, by various artists (*e.g.* Dinkel, Kaup, etc.), with photographs, illustrating vertebrate remains, chiefly Indian. The whole are mounted and bound in two volumes.

1869.

Z. The Rev. W. Kirby's manuscript Catalogue of British Staphylinidæ, in 3 vols., was presented by Dr. J. E. Gray.

1874.

B. The original drawings and manuscript notes, with correspondence accompanying the herbarium of William Wilson, of Warrington, were purchased.

262 original drawings of Irish Lichens were purchased with the herbarium of Isaac Carroll.

1875.

B. Considerable additions were made to the Botanical Department collections of drawings; 1,300 original water-colour drawings of Fungi, by W. G. Smith, and coloured engravings of upwards of 4,000 species of Algæ being purchased.

Z. A large number of zoological works and drawings (including 109 original water-colour drawings and pen-and-ink sketches of Fish, with 106 of Insects, Crustacea, and Arachnida, made by Arthur Adams during his voyage as naturalist on the *Samarang*, also the 65 original water-colour drawings of Chelonia, by J. De Carle Sowerby, used for the illustrations in T. Bell's "Monograph of the Testudinata," and Sowerby and Lear's "Tortoises"), which had belonged to Dr. J. E. Gray, were presented by his widow.

1876.

B. The transcripts, by two daughters of Mr. Dawson Turner, of Sir Joseph Banks' journal kept on his voyage with Capt. Cook

round the world in 1768-71, and of his correspondence, now bound in 20 volumes, was transferred from the MSS. Department. This journal was printed under the editorship of Sir J. D. Hooker, and published in 1896.

Robert Brown's Notes, MSS. and Diary from 1800 to 1803, which had been bequeathed to J. J. Bennett (his successor in the Keepership) and which had been allowed to remain in the Department, were presented by Mrs. Bennett.

James Sowerby's original water-colour drawings for the illustrations to his "English Fungi," with 347 other plates, were presented by the Rev. M. J. Berkeley.

730 original water-colour drawings of the higher Fungi, by Mrs. A. Russell, were bequeathed by her.

These two last have been incorporated in the systematically arranged collection of drawings of specimens of Fungi.

1877.

B. The accessions included 7,287 published engravings; a number of original drawings of Indian Plants by Dr. De Crespigny, which, with 180 drawings by G. D. Ehret, were purchased.

654 water-colour drawings by native artists, made under the superintendence of John Reeves, were presented by Miss Reeves.

Z. 482 folios of water-colour drawings, made by native artists for John Reeves, were presented by Miss Reeves.

1878.

B. The departmental collection of drawings was increased by the purchase of 8,025 engravings and 42 original drawings, including 12 by G. D. Ehret.

The correspondence of the Rev. A. Bloxam, and some manuscript notes of his on the Cellular Cryptogams of Leicestershire, were presented by his son.

1879.

B. A further increase of the collection of drawings was made by the purchase of 8,772 drawings and engravings.

A set of original drawings of South American Plants and of dissections of Plants, by John Miers, with the Catalogue of his herbarium, were presented by J. W. Miers.

M. Considerable accessions were made to the Mineralogical Department Library.

1880.

In view of the approaching removal of the Natural History Collections to South Kensington, and the consequent necessity of founding a Library for the use of the officers and students, a special grant, payable in yearly instalments, was voted by Parliament, the first instalment being granted for the following financial year.

It was decided that the several departments should continue to purchase and hold such works as related to their special subjects, while a fifth, the "General Library," under the charge of a special Assistant, should be constituted to contain those works containing matter common to two or more departments.

L. 2,048 volumes were therefore purchased this year for the General Library.

B. 68 works from the library of John Miers, annotated by him in relation to the Plants in his herbarium, were presented by J. W. Miers.

The collection of drawings and engravings formed by W. Wilson Saunders, with 2,517 other drawings and engravings; 928 original water-colour drawings, by John Miller (otherwise J. S. Müller), of the ramifications of Plants; and 25 original water-colour drawings of Fungi, by W. G. Smith, were purchased.

G. A fine copy of William Smith's geologically coloured map, "A delineation of the Strata of England and Wales, with part of Scotland," was presented by Mr. (afterwards Sir) A. W. Franks.

The set of original pencil drawings by A. Watelet, for the 60 plates of his "Description des Plantes fossiles du bassin de Paris," with those for 21 unpublished plates and their description in MS. were purchased.

M. The accessions numbered 603 volumes.

Z. The first catalogue of the departmental library, containing 1,700 titles, was printed, and issued in November.

1881.

B. R. A. Salisbury's notes and drawings of Ericaceous Plants were transferred from the Royal Gardens, Kew.

M. The accessions numbered 860 volumes. The first catalogue of this library, containing 1,297 entries, of which 39 refer to maps, was printed.

Z. The total number of works in this library was estimated at about 1,500; the accessions for the year being 182 works in 377 volumes.

1882.

L. 921 volumes had been transferred to this library from the Departments, and the extent of the collection at the end of the year was 7,659 volumes.

B. The original water-colour drawings for the illustrations to Maund's "Botanic Garden," representing 1,248 Plants, were presented by the Misses Maund.

13 folio volumes, containing original drawings of Indian Plants, formerly the property of Dr. Fleming, were purchased and have since been incorporated in the systematically arranged collection of drawings of specimens of Phanerogams.

M. The accessions numbered 103 works.

Z. 1,383 works in 2,350 volumes were added. A second edition of the Catalogue was issued in May.

1883.

L. The accessions numbered 2,261 volumes, of which 28 were presented and 79 transferred from other departments.

B. 219 original pencil drawings of Mosses, by P. Bruch, used in illustrating the "Bryologia Europæa" of Schimper, Bruch and Gumbel; 52 original drawings of Madagascar Orchids, by the Rev. W. Deans Cowan; and 210 original drawings, formerly the property of Dr. J. J. Roemer, were purchased.

A considerable addition to the collection of Autographs of Botanists was made, and the whole collection arranged and mounted.

M. 199 works were added.

Z. 1,777 works in 2,358 volumes were added.

1884.

L. 2,114 volumes were added, of which 98 were presented and 148 transferred from other departments. The total number of volumes being 12,034.

A Catalogue of this collection was issued early in the year.

B. 87 original water-colour drawings of Cape Plants, by F. Masson, the botanical collector, were presented by Mr. C. Lee. These were subsequently incorporated with a series by the same author from the Banksian Collection, and mounted and bound.

46 original water-colour drawings of Fungi, by W. G. Smith, 26 original drawings of Sumatran and Javan Plants, by H. O. Forbes, and 5,003 plates were purchased and incorporated with

the systematically arranged collection of drawings of specimens of Phanerogams.

22 coloured drawings by W. Roxburgh of Indian Palms, used in his "Plants of the Coast of Coromandel," were also acquired.

A series of pen-and-ink drawings, with autograph descriptions, by G. J. Camellus, entitled "Descriptiones Fruticum et Arborum Luzonis," formerly in Sir Hans Sloane's Library, was transferred from the MSS. Department.

88 autograph letters of Ray and his contemporaries were presented by J. D. Enys, and the original MS. of Derham's "Life of Ray" purchased.

G. 629 volumes and 302 pamphlets were added. A copy of William Smith's "New Geological Map of England and Wales," 1827, was presented by Mr. Carruthers.

M. 159 works in 305 volumes, and 36 pamphlets were acquired.

Z. 1,274 works in 2,450 volumes were added, making a total of 6,556 works in over 10,000 volumes in the whole library.

The third and last edition of the library catalogue was published in March.

1885.

L. 1,954 volumes were added, of which 139 were presented and 171 transferred from other departments.

The total number of volumes in the library was 13,988.

54 valuable large scale maps were presented, chiefly by the Governments of Cape Colony, New South Wales, South Australia, New Zealand, and Tasmania, being those of their respective colonies.

B. 183 original water-colour drawings of the Plants of the Straits Settlements, made by Christopher Smith, were purchased.

70 original water-colour drawings of Flowers, by G. von Spaendonck, were purchased.

281 plates of British Fungi, from works by Dr. M. C. Cooke, were presented by him.

1,415 plates of Plants, and 32 original water-colour drawings of Fungi, by W. G. Smith, were purchased.

The last three series have been incorporated in the respective collections of drawings of specimens of Plants.

G. 260 volumes, 121 pamphlets, and 41 maps were acquired. Three transcripts by Mary Anning, the celebrated fossil-

collector at Lyme Regis, of papers in the Transactions of the Geological Society, were presented by Lord Enniskillen.

M. 32 works in 44 volumes were added.

Z. 877 works in 1,176 volumes were acquired, including a very fine copy of Audubon's "Birds of America."

1886.

The Royal Society presented 34 miscellaneous works, which were distributed among the several libraries.

L. 1,313 volumes and 3 maps were added, of which 351 volumes and 3 maps were presented and 20 volumes transferred from other departments. These included :—

A set of De Bry's collection of Voyages (with the collation), presented by Lord Crawford.

153 original water-colour drawings and pencil sketches, by T. Baines, the African explorer, were purchased.

B. 212 books and pamphlets, and the whole of his mycological correspondence was bequeathed by C. E. Broome.

Proofs on India paper of the illustrations to Stevenson's "Hymenomyces Britannici" were presented by Mr. W. G. Smith.

1,922 original water-colour drawings of British Plants, by Miss H. Moseley, were purchased.

A series of original water-colour and pen-and-ink drawings of Plants, by M. J. Schleiden, of Jena, with the manuscript description of them, were purchased, and have since been bound in 9 volumes.

115 original sketches (some coloured) of Bornean Orchids, Pitcher-plants, &c., by F. W. Burbidge, were purchased.

493 original drawings of Indian Plants; and 42 original drawings of Orchids, by Miss Cooke, were acquired and have since been incorporated in the systematically arranged collections of drawings of specimens of Plants.

G. 256 volumes, 1,115 pamphlets, 26 cases of MSS., and 53 maps were added in the year.

Of these 897 books and pamphlets, with 26 cases of original drawings and MSS., all relating to Brachiopoda, and formerly part of the library of Dr. T. Davidson, were presented by Mr. W. Davidson.

226 pamphlets were acquired from the library of Prof. J. Morris.

M. 286 volumes and 208 pamphlets were added.

1887.

L. The collection was increased by the addition of 2,320 volumes and 1,949 maps. Of these 210 volumes were presented and 13 volumes transferred from other departments. 1,462 sheets of charts were received from the Admiralty, and 439 sheets of the Ordnance Survey on the scale of 1 in. = 1 m. Both these sets have been kept up.

The first contribution towards the collection of photographs was received this year.

B. The manuscript records of the distribution of British Plants, collected by H. C. Watson for his "Cybele Britannica," were received from the Director of the Royal Gardens, Kew.

G. 736 books, 226 pamphlets, and 259 maps were received, including 6 geological views and sections across various parts of England and Wales, by William Smith, presented by W. Topley.

M. 823 volumes and 134 pamphlets were acquired.

Z. The ordinary increase was 590 volumes; but the magnificent ornithological library formed by the ninth Marquess of Tweeddale, which was presented by his nephew, Capt. R. G. Wardlaw Ramsay, contained 698 works, in 2,560 volumes, with about 200 pamphlets, and formed the most important addition as yet received at any one time.

5 volumes of beautifully executed water-colour drawings, by Japanese artists, of different breeds of domestic Pigeons, probably executed for the library of some Japanese nobleman, were purchased.

1888.

The special grant for the purchase of books was all expended by 31st March of this year. A small annual grant for up-keep has since been allowed.

L. 1,325 volumes and 970 maps were added, of which 305 volumes were presented and 449 transferred from other departments. The maps included 740 sheets of charts from the Admiralty, and 210 sheets of the Indian Atlas.

B. Two volumes of Robert Brown's manuscript descriptions of Plants, discovered on a book-stall, were presented by Mr. J. Britten. 200 original drawings of Plants were added to the collection.

G. 168 volumes, 47 pamphlets, and 33 maps were acquired.

M. 284 volumes and 44 pamphlets were added.

Z. 355 volumes were acquired, bringing the estimated total in the library up to 9,489 works in 15,243 volumes.

1889.

About 1,716 duplicate volumes and parts were transferred from the Printed Books Department, Bloomsbury, and divided among the several libraries.

L. 1,010 volumes and 45 maps were added : of these 293 volumes were presented and 439 transferred from other departments. The total number at the end of year being 19,933 volumes and 3,541 maps.

G. 57 volumes and 409 pamphlets, with 47 maps were acquired, including Pt. i-iii and vi of William Smith's "New Geological Atlas" (purchased), and three volumes of manuscript notes and drawings by Caleb Evans.

M. 182 volumes and 80 pamphlets were added.

Z. The accessions amounted to 197 volumes and 477 parts, bringing the total up to 9,666 works in 15,440 volumes.

Sir J. D. Hooker presented his drawings of Antarctic Fish, made during the expedition of the *Erebus* and *Terror* in 1839-43.

1890.

L. 691 volumes and 28 maps were added, of which 316 volumes were presented, and 23 volumes with 26 maps were transferred from other departments.

Sir John Evans, K.C.B., presented sets of the publications of the Linnean Society of London from 1877, and of the Zoological Society of London from 1868 : he has subsequently presented the succeeding parts as issued.

B. The scientific correspondence of the Rev. M. J. Berkeley was presented. This included letters of C. E. Broome, whose own correspondence had been bequeathed in 1886. The two series are of great importance in connection with the Broome Herbarium.

A copy of the rare and valuable "Salictum Woburnense," by J. Forbes, privately printed in 1829 by the Duke of Bedford, was presented by Mr. F. Justen.

Drawings of 74 species of Victorian Fungi were received from the Victorian Government, through the President of the Victorian Commission at the Paris Exhibition of 1889, Baron Sir F. von Mueller.

G. 101 books and 75 parts, with 59 pamphlets and 32 maps were added.

M. 126 volumes and 119 pamphlets were acquired.

Z. 128 volumes and 468 parts were added.

1891.

L. The accessions comprised 612 volumes and 48 maps, of which 203 volumes and 17 maps were presented, and 6 volumes and 31 maps were transferred from other departments.

The Royal Society presented, by request of H. B. Brady, their copy of Soldani's rare work, "Testaceographiæ ac Zoophytophagiæ parvæ et microscopiciæ tomus primus (—secundus)," the Society receiving Brady's copy with his library.

G. 120 books and 293 parts, with 377 pamphlets and 193 maps were added, including 227 pamphlets presented by the Royal Society.

M. 207 volumes, 141 parts, and 3 maps were acquired.

Z. 38 volumes and 681 parts were added.

1892.

L. 819 volumes and 28 maps were added, of which 275 volumes and 25 maps were presented and 164 volumes transferred from other departments.

B. 25 original water-colour drawings of Fungi by J. Bolton, executed 1788-94, were purchased.

11 illustrations of species of *Masdevallia*, used by Miss Woolward in illustrating her book on the genus, were presented by her.

1,036 original water-colour drawings of Fungi, by G. E. Masee, were purchased and incorporated in the collection of drawings of specimens of Fungi.

G. 376 books and pamphlets, with 242 parts and 51 maps were added.

129 original water-colour drawings by A. T. Hollick and C. Berjeau, with 116 photographs and prints, of specimens illustrating the structure of "*Eozoon*" made for Dr. W. B. Carpenter, were presented by his son, the Rev. J. Estlin Carpenter.

A manuscript catalogue of the Fossil organic remains in the Cabinet of Mrs. M. H. Smith, of Tunbridge Wells, with water-colour drawings by S. P. Woodward, who compiled the catalogue, W. H. Bensted, and others, was presented.

M. 310 works in 203 volumes, 28 parts, with 196 memoirs and 5 maps were added.

Z. 138 volumes and 708 parts were acquired, making the total for the library of 9,850 works in 15,843 volumes.

213 original water-colour drawings of British Animals, viz.: 13 mammals, 122 birds, and 78 fish, executed by W. MacGillivray, between 1831 and 1841, were presented by his son.

1893.

L. The number of accessions was 705 volumes and 30 maps, of which 301 volumes and 28 maps were presented and 76 transferred from other departments.

Sir R. Owen's executors presented an extensive series of his MSS., including original autograph notes and illustrations for the Memoir on the Pearly Nautilus, of notes and synopses of lectures from 1828 to 1864, notes and sketches of remains of fossil Reptilia in various Museums, and a very large collection of original drawings by G. Scharf, J. Dinkel, J. Wolf, and other artists, of zoological subjects; many being the originals for illustrations to Sir R. Owen's papers and memoirs.

G. 334 volumes, 326 parts, and 33 maps were added.

M. 91 works in 100 volumes and 18 parts, with 24 memoirs and 2 maps were acquired.

Z. 53 volumes and 815 parts were added: the total for the library being 9,903 works in 15,962 volumes.

1894.

L. The increase for the year amounted to 723 volumes and 64 maps, of which 273 volumes and 31 maps were presented, and 42 volumes and 32 maps were transferred from other departments.

39 water-colour drawings, by native artists, of Chinese Plants, Birds, Reptiles, and Fishes were presented by F. A. Philbrick, K.C.

B. 50 original water-colour drawings of Flowers made from Nature, by J. Bolton, between 1785 and 1787, with manuscript title and preface dated 1788, were purchased.

G. 331 volumes, 429 parts, and 536 maps were added.

M. 144 works in 134 volumes and 10 parts, with 44 memoirs and 12 maps were acquired.

Z. 64 volumes and 799 parts were added.

1895.

L. 1072 volumes and 39 maps were added, of which 382 volumes and 39 maps were presented and 121 volumes were transferred from other departments.

38 volumes were presented by the Society of Antiquaries.

B. The manuscript copy, in the handwriting of Sarah Sophia Banks, of the journal of Sir Joseph Banks, kept during his voyage to Newfoundland and Labrador in 1766, was purchased.

2,449 water-colour drawings of British Fungi, by E. Wheeler, made between 1880 and 1895, were presented.

24 original drawings, by S. T. Edwards, for "The New Botanic Garden" were acquired.

G. 331 books and pamphlets, 406 parts, and 125 maps were added.

M. 231 works in 159 volumes, with 123 pamphlets and 19 parts were acquired.

Z. 69 works in 74 volumes, and 776 parts were added.

189 original water-colour drawings of marine Animals and Plants, taken during voyages between England and India by Mrs. H. Toynbee, in 1856-58, with manuscript notes, were presented by Capt. H. Toynbee.

1896.

A large and valuable set of 187 Dissertations on various subjects was presented by the Royal University of Upsala.

33 miscellaneous works were presented by the Linnean Society of London.

Both these donations were distributed among the several libraries.

L. 894 volumes and 19 maps were added, of which 507 volumes and 16 maps were presented, while 25 volumes were transferred from other departments.

185 water-colour, pen-and-ink, and pencil sketches, by G. Shaw, the former Keeper of the Natural History Section, with a portrait in oils of Sydney Parkinson, were presented by Mr. G. S. Parkinson.

B. A series of notes and descriptions, with a few pen-and-ink and pencil sketches of Peruvian Plants, by A. Mathews, in 3 vols., was presented by Mr. F. Justen.

A number of drawings by G. D. Ehret, S. T. Edwards, and W. G. Smith were purchased for the collection.

G. 243 new works, 558 parts, and 247 maps were added.

M. 151 works in 171 volumes, with 85 pamphlets and 25 parts were acquired.

Z. 47 works and 794 parts were added.

1897.

L. The increase for the year was 786 volumes and 84 maps, of which 428 volumes and 83 maps were presented, and 35 volumes and 1 map were transferred from other departments.

B. 74 water-colour drawings of Plants by J. Lindley, with drawings by W. G. Smith and others, were purchased.

G. 317 new works and 367 parts, with 105 maps were added.

M. 125 works in 199 volumes, 61 pamphlets, and 28 parts were acquired.

Z. 57 works in 60 volumes, and 858 parts were added.

Three life-sized photographs of *Apteryx*, and the first of several life-sized photographs of *Testudo daudinii*, were presented by the Hon. Walter Rothschild.

1898.

L. The accessions numbered 1,109 volumes and 167 maps, of which 489 volumes and 165 maps were presented, and 15 volumes and 1 map transferred from other departments.

G. 299 new works, 340 parts, and 303 maps were added.

42 water-colour sketches, by R. Inwards, of fossils collected by him and given to the Museum in 1880, were presented by the author.

Autograph manuscript notes, by J. Brown, of Stanway, chiefly relating to English Post-Pliocene deposits, with lists of the contained fossils, were presented.

M. 31 volumes, 61 pamphlets, and 35 parts were acquired.

Z. 58 works in 80 volumes, and 906 parts were added.

1899.

Series of publications of great value were received from the New South Wales and Queensland Governments, from the U.S. Department of Agriculture, from the Royal University of Upsala, and 51 books and pamphlets, dealing with Servian natural history, from Prof. P. S. Pavlović, of Belgrade.

These were distributed among the different departments.

L. 1142 volumes and 219 maps were added, of which 660 volumes and 143 maps were presented, and 98 volumes with 76 maps were transferred from other departments.

G. 194 new works, 360 parts, and 482 maps were added.

8 plates of original figures of Belemnites, by Martin Simpson, drawn for his "Fossils of the Yorkshire Lias," but not published, were presented.

M. 53 works and 84 pamphlets, with 35 parts and 32 maps were acquired.

Z. 53 works in 57 volumes, and 906 parts were added.

1900.

L. The accessions numbered 718 volumes and 338 maps, of which 372 volumes and 338 maps were presented, and 14 volumes transferred from other departments. The collection of Photographs of Animals also received substantial addition, 105 photographs having been presented.

The extent of this collection at the end of the year was 29,204 volumes, 4,605 maps, and 318 photographs, with 500 sheets of drawings in the Owen Collection.

B. The set of original water-colour drawings, by W. G. Smith, of British Basidiomycetes was completed.

The extent of the departmental library at the close of the year was 14,980 volumes, 335 MSS., and 5,392 pamphlets.

G. 211 new works, 365 continuations, and 165 maps were added.

No census of this library was taken till early in 1903, when it was found to contain 9,395 volumes of catalogued works, 2,821 minor uncatalogued separata, 5,569 sheets of maps belonging to 286 sets, and 356 sheets of charts and diagrams representing 5 sets.

M. 43 volumes and 60 pamphlets, with 568 parts and 8 maps were acquired.

It is computed that at the end of the year this collection comprised 6,339 volumes, 1,770 memoirs and pamphlets, and 81 maps in 252 sheets.

Z. 36 works in 65 volumes, and 1,134 parts were added.

The extent of the collection at the end of the year was returned as 10,298 works in 17,167 volumes.

According to a rough estimate based on the cataloguing returns, there were in the whole Museum at the end of 1900, 75,202 volumes and 5,780 maps. This, however, is a low estimate, since it does not take count of continuations.

3. LIST OF IMPORTANT BOOKS, MANUSCRIPTS, AND DRAWINGS
ARRANGED UNDER THE NAMES OF AUTHORS, AND PREVIOUS
OWNERS.

(The initial of the Departmental Library in which the various works are kept is placed after each entry.)

Her Majesty Queen Victoria

In 1841, her Majesty the late Queen Victoria presented a large series of water-colour drawings by Francis Bauer, "being that part of Mr. Bauer's drawings made at the expense of the late Sir Joseph Banks, Baronet, which did not accompany his Library and Botanical Collections when transferred to the Museum, but was bequeathed by Sir Joseph to his late Majesty King George the Fourth" (B).

Abbot (JOHN)

A collection of original water-colour drawings of the Insects and Plants of Georgia, by J. Abbot, with manuscript descriptions, in 17 volumes, formerly the property of J. Francillon, was purchased in 1818 (Z). Some of these figures have served as the types of new species.

Adams (ARTHUR) [1820-1878]

Adams served as Assistant Surgeon and Naturalist on board the *Samarang*, in 1843-46. 109 water-colour and pen-and-ink sketches of animals made by him during that voyage were presented in 1875 (Z).

Agassiz (JEAN LOUIS RODOLPHE) [1807-1873]

The Museum possesses a copy of this celebrated ichthyologist's "Modèle de mes Cadres de Fossiles," annotated in his own writing. This was a privately-issued scheme, or table, circulated apparently with the view to obtain co-operation and assistance. The present copy came from the library of John Phillips (G).

Aiton (WILLIAM) [1731-1793]

Aiton had charge of the Botanic Gardens at Kew, and was instrumental in sending out Francis Masson, the collector (*q.v.*), some of whose drawings are in the Museum (B and Z).

The original drawings for twelve out of the thirteen plates, drawn by various artists, for Aiton's "Hortus Kewensis" form No. 17 of the Banksian MSS. (B).

Allman (WILLIAM) [1776-1846]

Allman held the post of Professor of Botany at Dublin from 1809 to 1844. An autograph MS. entitled "An attempt to illustrate a mathematical connection between the parts of Vegetables," &c. (B) formed part of R. Brown's collection, presented in 1876. It is apparently the original MS. of a paper read before the Royal Society in 1811 but not printed by that body: an abstract was privately issued by Allman in 1844.

Anderson (JOHN) [-1847]

Anderson accompanied Captain P. P. King in his circumnavigation on the *Adventure* (1826-30) as botanical collector.

A small manuscript "List of Plants collected in the Island of Chiloe in 1829-30" is preserved (B).

Anderson (WILLIAM) [-1778]

Anderson served as surgeon's mate on the second voyage of Captain J. Cook to the Pacific (1772-75), and as naturalist on the third voyage (1776-78). His manuscript notes on the Birds observed on the second voyage, and his descriptions in MS. of the Plants and Animals of the third voyage formed the Banksian MS. No. 81 (**B** and **Z**).

Anning (MARY), Miss [1799-1847]

Autograph transcripts of three memoirs in the "Transactions of the Geological Society," with pencil copies of the accompanying plates, by Miss Mary Anning, the well-known fossil-collector at Lyme Regis and discoverer of *Ichthyosaurus*, were presented in 1885 (**G**).

Arendt (J. J. F.)

Arendt was a botanical writer, apparently resident at Osnabrück. His autograph "*Floriferti Osnaburgensis anomali . . . specimen primum*," 1848, is preserved in the Museum (**B**).

Aublet (JEAN BAPTISTE CHRISTOPHE FUSÉE) [1720-1778]

The French botanist Aublet was successively charged with the task of founding botanic gardens in the Île de France, Guiana, and San Domingo: he wrote a "*Histoire des Plantes de la Guiane Française*," and his original drawings for the plates of this work with many unpublished ones, and his manuscript descriptions form the Banksian MSS. Nos. 29, 58, 59 and 60 (**B**).

Baines (THOMAS) [1822-1875]

153 original water-colour and pencil sketches, being a portion of those made by this celebrated African explorer and artist during an expedition to explore the goldfields of Mashonaland, were purchased in 1886 (**L**). They in part illustrate his book on "*The Gold Regions of South-eastern Africa*," in which he supports the theory that the land of Ophir lay in Mashonaland, and his sketches include one of the old workings near Maghoondas Village, in which district also he notes and depicts natives whose method of wearing their hair strikingly resembles that shown in drawings on Egyptian monuments.

Banks (Sir JOSEPH), Bart. [1743-1820]

The celebrated Library formed by Sir J. Banks was handed over to the care of the Trustees in 1827. The collection of books was placed in the Printed Book Department, with the exception of 26 works, numbering 149 volumes, chiefly systematic works used in the Herbarium, which were either duplicates or contained manuscript notes, by Solander, Dryander, and Robert Brown, and which, with the MSS., Prints and Drawings, remained in the custody of the Keeper of the Banksian Botanical Collections.*

The manuscripts and drawings included the following important items, many of which are cited in Dryander's Catalogue of the Banksian Library:—

* Some of these were afterwards transferred to the Department of Manuscripts.

Title.	Banksian Number.	Department where now kept.
AITON (W.) [12 out of the 13 original water-colour drawings for Aiton's "Hortus Kewensis," by J. Sowerby, J. F. Miller, F. P. Nodder, G. D. Ehret, and Franz Bauer]	17	B
ANDERSON (W.) Genera nova Plantarum . . . in itinere nostro [<i>i.e.</i> Capt. Cook's third voyage, 1776-78] visa, <i>etc.</i>	81	B
— Descriptiones Plantarum, <i>etc.</i>		
— Zoologia nova, <i>etc.</i>		
— Characteres breves Avium . . . 1772-75		Z
ANIMALS. [Descriptions of Animals observed on a Voyage to Canton, with original water-colour drawings.] 2 vol.	84 & 85	Z
AUBLET (F.) [Manuscript descriptions of Plants collected in French Guiana]	29	B
— [Original pencil drawings for the plates in his "Histoire des Plantes de la Guiane Française"]	58 to 60	B
— [60 foll. of original unpublished drawings of Guiana Plants with manuscript descriptions]	61	B
BANKS (<i>Sir</i> J.) [Autograph Notes on useful plants]		B
— [Various manuscript notes interspersed with Solander's <i>q.v. infra</i>]		B
BARTRAM (J.) [7 autograph letters to Dr. Fothergill (1769-71)].	23	B
BARTRAM (W.) [Original MS. of his "Travels through . . . Carolina, Georgia," <i>etc.</i>]	78 & 79	B
— [102 foll. of descriptions with 53 drawings of the Plants and Animals of Carolina, Georgia, <i>etc.</i>]	23	B
BAUER (FRANZ L.) [Original water-colour drawings illustrating the Germination of Wheat and the Diseases of Corn, with a large miscellaneous series chiefly of the more remarkable Plants that had flowered at the Royal Gardens, Kew, of which a further series was presented in 1841].	..	B
BLAIR (P.) [Copies of Dr. P. Blair's Correspondence, 1725-27].	35	B
— [Manuscript] Catalogue of the . . . Botanical discoveries . . . made by Dr. P. Blair, <i>etc.</i>		
BOBART (J.) <i>The Younger</i> . [Copy by Sir J. Banks of a "Catalogue of Plants sent from Mr. Bobart . . . 1689"]	94	B
BOLTON (J.) [Original drawings for the plates of his "Filices Britannicæ"].	36	B
BREWER (S.) [Manuscript copy by D. Solander of his] Botanical Journey through Wales in . . . 1726 and 1727.	95	B
BROWNE (P.) [Autograph MS.] Catalogue of the Plants of the English Sugar Colonies.	70	B
BUCHANAN, afterwards HAMILTON (F.) Enumeratio Plantarum quas in adeundo civitatem Barmanorum regiam . . . anno 1795 observavit F. Buchanan. [MS. with 53 drawings.] 2 vol.	18 & 19	B
CALEY (G.) [Autograph Journals of Journeys to New South Wales]	..	B
— [Autograph] Descriptions of Plants of New South Wales		

Title.	Banksian Number.	Department where now kept.
CASTELVETRI (G.) [Autograph MS.] Brieve racconto di tutte le Radici . . . in Italia, etc. 1614 . . .	91	B
CIRILLO (D.) [MS.] Institutiones Botanicae, etc. . .	66	B
— [Autograph letter to Brownlow, Earl of Exeter]	76	B
CHINA. [24 water-colour drawings of Fish by a Chinese artist at Canton]	11	Z
— [62 water-colour drawings of Chinese Plants, drawn under the superintendence of J. B. Blake, by a native artist]	12	B
— [220 water-colour drawings of Chinese Plants and Animals, by a native artist.] 2 vol.	27 & 28	B
COLDEN, afterwards FARQUHAR (JANE) [Autograph MS.] Flora Nov-Eboracensis, etc.	[99]	B
DILLENUS (J. J.) [Original drawings by himself for pls. i-lxxix of his "Historia Muscorum"]	56	B
DRYANDER (J.) [Manuscript Catalogue of the drawings of Animals in the Library of Sir J. Banks] . . . . .	..	Z
— [Index to the Species of Plants described and figured by N. J. von Jacquin in his MSS.] . . . . .	..	} B
— Massonii Flora Maderensis. [Autograph MS.] . . . . .	..
DURAND (P.) De quibusdam Zoophitis quæ in sinu Gibraltario reperiuntur, etc.	[102]	B
EHRET (G. D.) [65 original water-colour drawings of Plants from the collection of Sir R. More]	16	B
— [Original drawings of Rare Plants, Fruits and Seeds.] 4 vol.	{ [106 to 109] }	} B
— [17 original drawings of Plants collected by Banks in Newfoundland*] . . . . .			..	B
ELLIS (W. W.) [115 original water-colour drawings of Animals made during Capt. J. Cook's third voyage, 1776-78]	33	Z
FORSTER (J. G. A.) [261 foll. of original water-colour and pencil drawings of Animals made during Capt. Cook's second voyage, 1772-75.] 2 vol.	6 & 7	Z
— [Original water-colour and pencil drawings of Plants made during Capt. J. Cook's second voyage.] 2 vol.	8 & 9	B
GERARD (J.) [MS. copy of his] Catalogus Arborum . . . ac Plantarum . . . in horto J. Gerardi . . . nascentium . . . 1596	89	B
HOUSTOUN (W.) [Autograph] Catalogus Plantarum in America observatarum	67	B
— [Autograph MS.] Plantæ observatæ circa Kingston in . . . Jamaica, et Havanam in . . . Cuba	} 68	} B
— [Autograph MS.] Nova Plantarum Americanarum genera, etc.		
— [Autograph MS.] Plantæ circa Veram Crucem observatæ . . . . .			69	B
— [Autograph MS.] Nova Plantarum genera		
INDIA. [MS.] Declaração das Aruoes . . . Plantas . . . e Ervas virtuosas . . . seruem para se aplicar a varias doenças declaradas pellos fizicos deste Anjenga . . . 1750 [228 water-colour drawings with manuscript descriptions]	22	B

* Five drawings belonging to this set are placed with others used in illustrating Aiton's "Hortus Kewensis." [Cf. supra, p. 23.]

Title.	Banksian Number.	Department where now kept.
INDIA [559 water-colour drawings of Bengal Plants, painted by native artists, with their native and occasionally also the Linnean names. 3 vol.]	13 to 15	B
JACQUIN (N. J. VON) Autograph notes and letters addressed to J. Dryander, with sketches and water-colour drawings . . . . .	..	B
JOHNSON (T.) Iter Plantarum investigationis ergo susceptam . . . in agrum Cantianum . . . 1629	96	B
— 1632. [Both in S. Dale's handwriting]		
KØNIG (J. G.) [Autograph journals of his voyages, with lists and descriptions of East Indian (including Siam and Malacca) Plants, Animals and a few Minerals.] 21 vol.	37 to 55	B
L'HÉRITIER DE BRUTELLE (C. L.) [51 autograph letters to J. Dryander. 1785 to 1790]	[101]	B
LIGHTFOOT (J.) [Transcript by Solander of his Journal of a botanical excursion in Wales. [1775]]	86	B
LIND (J.) A Catalogue of such Chinese and Japanese plants whose Chinese characters are known and are botanically described, &c. . . . .	..	B
LINNÆUS (C.) Föreläsningar ofver Djur-riket 1748; upptecknade of L. Montin.	71	Z
— — — Fundamenta botanica . . . 1748	72	B
— — — Växt-riket . . . 1746-48	73	B
— — — Sten-riket . . . 1747	74	M
— — — Diæten . . . 1748-49	75	B
LOUREIRO (J. DE) [Autograph MS.] Nova genera Plantarum in Cochinchina sponte nascentium, &c.	93	B
M., R. [MS.] List of the different sorts of Grain, &c., cultivated in the Tanjore country [with 15 water-colour drawings by a native artist]	97	B
MARTYN (J.) and (T.) [Correspondence]	[103]	B
MASSON (F.) [54 water-colour drawings of Plants, 9 of Animals, and 2 views of Niagara] . . . . .	..	{ B Z
MONTE BOLCA. [8 foll. of rough water-colour sketches of fossil Plants, and 12 of fossil Fish from Monte Bolca]	[114]	G
MONTIN (L.) [Autograph.] Beskrifning öfver en resa . . . til Lapska fjällarne åfvan Luleå stad	83	B
PARK (MUNGO) [20 water-colour drawings of Fish from the coast of Sumatra with manuscript descriptions of six species. 1792] . . . . .	..	Z
PARKINSON (S.) [40 water-colour drawings of Animals taken from specimens or drawings executed in India by order of J. G. Loten, and forming the originals of some of the figures in Pennant's "Indian Zoology," and "Quadrupeds"]	20	Z
— [Original water-colour drawings of Plants and Animals made during Capt J. Cook's first voyage, 1768-71; with finished drawings by T. Burgis, J. Cleveley, Jas. Miller, J. F. Miller and F. P. Nodder, made from the incomplete sketches.] 19 vol. . . . .	..	{ B 18 vol. Z 1 vol.

Title	Banksian Number.	Department where now kept.
PETIVER (J.) [73 rough water-colour drawings of Cape Plants, some of which were used for the plates in Petiver's "Gazophyllacii naturæ et artis decas nona"]	88	B
PLUMIER (C.) [124 rough coloured drawings of Plants, seemingly from old woodcuts]	62	B
— [418 foll. rough water-colour drawings of Plants and some Animals, with their names in Greek and Latin]	63	B
PLUMIER (C.) [312 original water-colour and pen-and-ink drawings of Plants, many of which were published in his various works.] 5 vol.	1 to 5	B
PULTENEY (R.) [MS.] Flora Malabarica, etc.	26	B
— [Autograph MS.] A Catalogue of Plants spontaneously growing about Loughborough, etc.	90	B
ROBINSON (Sir T.) [MS. copy by Banks of] A catalogue of Plants observed in several parts of Wales in 1689	94	B
ROME. [MS.] Flora rudrata Romana, etc.	[100]	B
SEYFFERT (H. C.) Icones Fungorum, etc. [133 original water-colour drawings]	65	B
SHERARD (W.) [Autograph Notes and Observations on the first two volumes of Ray's "Historia Plantarum"]	80	B
SOLANDER (D. C.) [An extensive series of MSS. including notes and descriptions of Animals and Plants observed during the voyage with Banks to the South Pacific, and to Iceland, as well as indexes and lists compiled in connection with his curatorship of Banks' Collections and Library, and many of them containing notes in Sir J. Banks' handwriting] . . . . .	..	B and Z
SOWERBY (J.) [103 foll. of original drawings for No. 2-4 of Dickson's "Fasciculus Plantarum Cryptogamarum Britannicæ"]	21	B
STEPHENS (W.) Catalogus Plantarum in Horto Dubliniensi. [MS. which, after p. 41, is in Stephens's own handwriting]	92	B
SWEDEN. [192 original water-colour drawings on 24 pls. of Swedish Moths, Caterpillars and Spiders]	87	Z
TILLI (M. A.) [Autograph MS.] Specimen Plantarum quæ in Horto Medico Sapientiæ Pisanae locisque finitimis extant. 1713-30	[111]	B
TOURNEFORT (J. P. DE) Catalogue des Plantes que M. P. de Tournefort trouva dans ses Voyages d'Espagne et de Portugal copié de l'original, etc.	82	B
WATLING (T.) [70 water-colour drawings of Animals and Plants made near Port Jackson, some of which were used in drawing the plates for J. White's "Journal of a Voyage to New South Wales"]	34	B
YOUNG (W.) A Natural History of Plants, containing the production of North and South Carolina, etc. [302 water-colour drawings with manuscript, index and dedication]	24 and 25	B

In 1876, a transcript, by the daughters of Mr. Dawson Turner, of the original Journal kept by Sir J. Banks during his voyage with Capt. J. Cook, 1768-71, was transferred to the Botanical Department. The original, which had been deposited with the MSS. Department to become the property of the Trustees on the death of Lady Knatchbull, was subsequently claimed and removed by Lord Brabourne, by whom it was sold in 1886 for £7 2s. 6d. The journal was afterwards printed from a transcript of the Dawson Turner copy, edited by Sir J. D. Hooker and published in 1896.

Transcripts by the same hands of Banks' correspondence were transferred with the Journal and are now bound in 20 volumes.

In 1895 a copy by Miss S. S. Banks of the journal, kept by Sir Joseph Banks during his voyage to Newfoundland and Labrador in 1766, was acquired (B).

Barclay (GEORGE) [fl. 1835-1841]

Barclay accompanied Capt. Belcher as botanical collector on board the *Sulphur* (1836-41). His autograph journal of the voyage is preserved in the Museum (B).

Bartram (WILLIAM) [1739-1828]

William Bartram, son of the botanist, John Bartram [1701-1777] (seven of whose letters to Dr. Fothergill form the Banksian MS. no. 23), travelled in 1773 at the request of Dr. Fothergill through the southern portions of the United States, and the original manuscript of his "Travels through . . . Carolina, Georgia," etc., and a volume of 102 fols, containing 53 original drawings, with manuscript descriptions of the Plants and Animals of those districts, form the Banksian MSS. no. 23, 78, and 79 (B).

Bauer (FERDINAND LUCAS) [1760-1826]

F. L. Bauer, who accompanied Robt. Brown on Flinders' voyage to Australia, brought back a series of water-colour drawings of the Plants and Animals observed. 49 of his drawings of Animals (Z) and 203 of Plants (B) were presented by the Lords Commissioners of the Admiralty in 1843, and two portfolios of his drawings were bequeathed in 1858 by Robert Brown (B).

His original drawings for some of the plates to A. B. Lambert's "Genus *Pinus*" are preserved in the Museum (B).

Bauer (FRANZ ANDREAS) [1758-1840]

F. A. Bauer was employed by Sir Joseph Banks in making drawings of Plants in the Royal Botanic Gardens at Kew, the work being continued after Sir Joseph's death under the special provisions contained in his will, until the decease of Bauer. His drawings illustrating the "Germination of Wheat" and the "Diseases of Corn," with many others, were included in the Banksian Collection, and came to the Museum in 1827; but the extensive series of the drawings made at Kew after Banks' death and bequeathed to H.M. George IV., was presented to the Museum in 1841 by her late Majesty Queen Victoria (B).

His original drawings for the plates to Sir W. J. Hooker's "Genera Filicum," and other works with 127 drawings of British Orchids, and some illustrating the form and structure of various parts of Plants, are preserved in the Museum (B).

Other drawings of his were purchased in 1879 (B), while some illustrative of microscopic anatomy, done for Sir E. Home, were given in

1893 by the executors of Sir R. Owen, in whose collection of drawings they are (**L**).

One of the 25 copies of vol. i of A. B. Lambert's "*Genus Pinus*," coloured by him, is in the Museum (**B**).

Bennett (JOHN JOSEPH) [1801–1876]

Appointed assistant to Robert Brown when the Banksian Herbarium was transferred to the British Museum in 1827, Bennett succeeded Brown as Keeper of the Botanical Department in 1858. Brown had bequeathed to him a number of books and MSS., which remained in the Department and were presented to the Trustees in 1876 by Mrs. Bennett (**B**).

The original pencil drawings by J. and C. Curtis for Bennett and Brown's "*Planta Javanica rariores*," with proof engravings and hand-coloured proofs after letters of the plates are preserved (**B**).

Berkeley (MILES JOSEPH) [1803–1889]

Berkeley, the distinguished mycologist, presented 530 original water-colour drawings done by James Sowerby for the "*English Fungi*," in 1876 (**B**).

A series of his letters to C. E. Broome was bequeathed with the latter's correspondence in 1886 (**B**). Berkeley's own correspondence was presented in 1890 (**B**).

Blair (PATRICK) [*fl.* 1706–1728]

Copies of the correspondence and a "*Catalogue of the discoveries . . . made by Dr. P. Blair*," botanist and surgeon, form the Banksian MS., No. 35 (**B**).

Blake (JOHN BRADBY) [1745–1773]

Sent out in 1766 to Canton as one of the Hon. East India Company's supercargoes, Blake devoted himself to Natural Science. A volume of drawings of Chinese Plants made under his superintendence by a native artist form the Banksian MS., No. 12.

Bloxam (ANDREW) [1801–1878]

Bloxam went as naturalist on the *Blonde* in 1824–25, and on his return entered the church, becoming Rector of Twycross, in Leicestershire, and afterwards of Harborough Magna, in Warwickshire. His manuscript notes on the Cellular Cryptograms of Leicestershire, and his Correspondence (forming 1 vol.), were presented by his son in 1878 (**B**).

Bolton (JAMES) [*fl.* 1775–1795]

The self-taught naturalist of Halifax, Yorks., J. Bolton, etched the illustrations for his own works.

His original drawings for the plates of his "*Filices Britannicæ*" form the Banksian MS., No. 36 (**B**).

25 original water-colour drawings of Fungi, executed 1788–1794, were purchased in 1892 (**B**).

50 original water-colour drawings of Flowers from Nature, made 1785–87, were purchased in 1894 (**B**).

Botanical Society of London.

The manuscript of the "*Proceedings*," 1724–26, of this Society, which was a distinct Society from the later one bearing the same name (1836–57), is preserved in the Museum (**B**).

Brady (HENRY BOWMAN) [1835-1891]

Brady made a special study of the Foraminifera. A copy of Soldani's rare work, "Testaceographiæ ac Zoophytographiæ parvæ et microscopiæ tomus primus (— secundus)" was at Brady's request presented to the Museum by the Royal Society in 1891, his own copy remaining in their possession (L).

Brewer (SAMUEL) [*fl.* 1700-1742]

As botanical collector for Dillenius and others, Brewer made a collecting tour through Wales. A copy in Solander's handwriting of his unpublished "Botanical Journey through Wales in . . ., 1726 and 1727," forms No. 95 of the Banksian MSS. (B).

Broome (CHRISTOPHER EDMUND) [1812-1886]

C. E. Broome, the mycologist, bequeathed his books and pamphlets to the number of 212 and the whole of his mycological correspondence with his Herbarium in 1886 (B).

A further series of his letters addressed to M. J. Berkeley was presented with the latter's correspondence in 1890 (B).

Brown (JOHN), *of Stanway* [1780-1859]

J. Brown was one of the pioneers in Pleistocene palæontology. His autograph notes, chiefly relating to English Post-Pliocene deposits with lists of the contained fossils, were presented in 1898 (G).

Brown (ROBERT) [1773-1858]

Brown accompanied the expedition under Flinders to Australia; as botanist; in 1810 he succeeded Dryander as librarian to Sir Joseph Banks; while from 1827 to 1857 he was Keeper of the Botanical Department.

He bequeathed to the Trustees two portfolios of drawings by Ferdinand L. Bauer "to be placed with the other productions of the same artist," and to his successor, J. J. Bennett, some books and pamphlets with numerous MSS., which were presented to the Trustees in 1876 by Mrs. Bennett (B). The more important of these were, his Diary from 1800 to 1803, a Flora of Madeira, a List of Gaelic Plant Names, and Descriptions of Ferns, all in his own handwriting.

Some of his autograph descriptions of Plants in two volumes were presented in 1888 by Mr. J. Britten (B).

The original pencil drawings by J. and C. Curtis, for Bennett and Brown's "Plantæ Javanicæ rariores" are preserved, and also Brown's correspondence in 3 vols. (B).

Browne (PATRICK) [1720?-1790]

While practising medicine in the West Indies, Browne studied their natural history, especially that of Jamaica.

An autograph "Catalogue of the Plants of the English Sugar Colonies" forms No. 70 of the Banksian MSS. (B).

Bruch (PHILIPP) [1781-1847]

Bruch, who was an apothecary and botanist at Zweibrücken, devoted much time to the study of Mosses.

219 of his original pencil drawings of Mosses used in illustrating the "Bryologia Europæa" were purchased in 1883 (B).

Buchanan, afterwards Hamilton (FRANCIS) [1762–1829]

Buchanan went out in 1794 as surgeon in the East India Company's Service. In the following year he accompanied the mission to Ava; his autograph descriptions with 53 drawings of the plants he observed form the Banksian MSS., No. 18 and 19 (B).

Buonamici (GIOVANNI FRANCESCO)

A transcript of Dr. Buonamici's original MS. "De Plantis quæ in Melitæ et Gaulo observantur" (written about 1670), marked "Ex Biblioth. Boisy, MS. No. 21" is preserved (B). This work was printed as "Pugillus Meliteus," by F. P. Cavallini in 1689 under his own name, and reprinted by Brückmann in 1737; in both cases the Maltese names which appear in the MS. were omitted.

Burbidge (FREDERICK WILLIAM) [1847–]

Burbidge travelled in the Eastern Archipelago, paying especial attention to the botany of those regions.

115 original sketches, some coloured, made in Borneo, of Orchids, Pitcher-plants, etc., were purchased in 1886 (B).

Burgis (THOMAS) [fl. 1776]

Burgis was employed by Banks to make finished drawings of Plants from sketches by S. Parkinson, J. F. Miller, and others. Some of these are among the Banksian Collection of Drawings (B).

Caesalpinus (ANDREAS) [1519–1603]

A manuscript of the celebrated Italian physician and natural philosopher Caesalpinus, entitled "A. Caesalpini epistola de methodo Rei Herbarie prefixa horto suo sicco qui nunc Florentiæ in Bibliotheca D. comitis R. Pandulphini adservatur," Pisis, 1563, is in the Museum (B).

Caley (GEORGE) [-1829]

Caley, who was at first employed in his father's stables, was led by his desire to know more about the herbs used for veterinary purposes, to study botany, and was later sent out by Sir Joseph Banks to collect in New South Wales. His autograph journals and descriptions of the Plants collected formed an item of the Banksian Collection (B).

Camellus, or Kamel (GEORGIUS JOSEPHUS) [1661–1706]

Kamel went as Jesuit missionary to the Philippines.

A volume of pen-and-ink drawings with autograph descriptions entitled, "Descriptiones Fruticum et Arborum Luzonis," formerly in Sir Hans Sloane's library, was transferred from the MSS. Department in 1884 (B).

Carmichael (DUGALD) [1772–1840]

Two MSS. of D. Carmichael are in the Museum, viz. :—

[Autograph] Catalogue of Plants collected in Mauritius and Bourbon in 1812–1814 (B).

[Autograph] Gramina Capensia [and descriptions of Cape Plants] (B).

Carpenter (WILLIAM BENJAMIN) [1813–1885]

For some years before his death, the well-known naturalist, Dr. W. B. Carpenter, had been collecting materials for a Monograph on "*Eozoön*." These included 129 water-colour drawings, by A. J. Hollick and C. Berjeau, with 116 photographs and prints, now mounted and bound in

three volumes, that were presented by his son, the Rev. J. Estlin Carpenter, in 1892 (G).

Carroll (ISAAC) [1828-1880]

262 original pencil drawings, roughly coloured, of Lichens, the work of I. Carroll, and his autograph Catalogue of the Plants of Iceland were purchased, with his Herbarium, in 1874 (B).

Castelvetri (GIACOMO)

A manuscript entitled "Brieve racconto di tutte le Radici, di tutte l'Herbe et di tutti Frutti, che crudi, o cotti in Italia si mangiano," &c., 4°. Londra, 1614, by G. Castelvetri, forms the Banksian MS. No. 91 (B).

Cirillo (DOMENICO) [1739-1799]

The Italian doctor and naturalist, Cirillo, wrote largely on Botany. He corresponded with Brownlow, Earl of Exeter, and an autograph letter to that nobleman on Sicily, giving a list of the Flora, with the unpublished MS. of his "Institutiones Botanicae juxta methodum Tournefortianum" form the Banksian MSS. No. 66 and 76 (B).

Cleveley (JOHN) [1747-1785]

Cleveley, the marine painter, was employed by Banks as draughtsman on the voyage to Iceland, and also to prepare finished drawings from the sketches made by Sydney Parkinson during Capt. Cook's voyage round the World in 1768-71. Many of these are among the drawings in the Banksian Collection (B).

Colden, afterwards Farquhar (JANE)

Jane Colden was daughter of Cadwallader Colden, the botanist, and Governor of New York. Her autograph "Flora Nov-Eboracensis" forms the Banksian MS. [No. 99] (B).

Collinson (PETER) [1694-1768]

Peter Collinson, the naturalist and antiquary, traded with the American Colonies, and some of his collections were in Sir Hans Sloane's Museum. His autograph "Account of the Introduction of American Seeds into Great Britain," 1766, is preserved (B).

Cook (JAMES) [1728-1779]

Of MSS. and drawings relating to Capt. Cook's three celebrated voyages the Museum possesses:—

First Voyage, 1768-71.

A transcript of Sir J. Banks' journal (B).

Copious manuscript lists and descriptions of the Animals and Plants collected. By D. C. Solander (B, Z).

A large collection, filling nineteen volumes, of the original drawings by S. Parkinson (with finished drawings prepared from his incomplete sketches, by T. Burgess, J. Cleveley, J. Miller, J. F. Miller and F. P. Nodder) of the Animals and Plants obtained (B, Z).

Second Voyage, 1772-75.

Short manuscript descriptions of the Birds observed. By W. Anderson.

The original pencil and water-colour sketches of Animals and Plants made during the voyage. By J. G. A. Forster (B, Z).

Third Voyage, 1776-80.

Manuscript descriptions of the Animals and Plants. By W. Anderson (B, Z).

115 original water-colour drawings of the animals observed. By W. W. Ellis (Z).

Cowan (WILLIAM DEANS)

52 original drawings of Madagascar Orchids, by the Rev. W. D. Cowan, were purchased in 1883 (B).

Crawford, JAMES LUDOVIC LINDSAY, 26th Earl of [1847-]

In 1886 Lord Crawford presented a set of De Bry's Collection of Voyages, 25 volumes and the volume on their collation (L).

Crow (FRANCIS)

"A Catalogue of rare fossil Fruits (— of minute fossil Shells, etc.) from Sheppy Island," etc., in the collection of F. Crow of Faversham, 1810, etc., with 831 pencil drawings is preserved in the Museum (G).

Cunningham (ALLAN) [1791-1839]

As Botanical Collector to the Royal Gardens, Kew, Cunningham travelled in Brazil and New South Wales. Two of his MSS. are in the Museum, viz. :—

[Autograph] Journal of the proceedings of Mr. J. Bowie and Mr. A. Cunningham . . . sent out to Rio de Janeiro to collect Plants.

Original MS. of the "Few General Remarks on the Vegetation of certain coasts of Terra Australis," which was appended to P. P. King's "Narrative."

Curtis (J.) and (C.)

The original pencil drawings by J. and C. Curtis for the illustrations to Bennett and Brown's "Plantæ Javanicæ rariores" are preserved in the Museum (B).

Dale (SAMUEL) [1659 ?-1739]

S. Dale the botanist, practising as physician and apothecary at Braintree, Essex, was a friend of Ray, and corresponded with Sir H. Sloane. His autograph copies of T. Johnson's "Iter Plantarum investigationis . . . in agrum cantianum," &c., 1629 and 1632, form the Banksian Museum MS. No. 96 (B).

Davidson (THOMAS) [1817-1885]

Davidson devoted his life to the study of the Brachiopoda.

The whole of his MSS. and drawings in 22 volumes with his library of 897 books and pamphlets relating to the Brachiopoda were presented in 1886 (G).

De Crespigny (EYRE CHAMPION) [1821-1895]

De Crespigny became Conservator of Forests in India and Superintendent of the Botanic Gardens at Dapsorie.

A collection of his original drawings of Indian Plants was purchased in 1877.

Derham (WILLIAM) [1657-1735]

The original MS. of Derham's "Life of Ray" was purchased in 1884 (B).

Deschamps (L. A.)

Deschamps accompanied Entrecasteaux as naturalist on the *Recherche* during the expedition in search of La Pérouse.

His unpublished autograph journals kept during the voyage and on his subsequent travels in Java, with materials for a Flora Javanica, water-colour sketches of Javan scenery, Plants (B), and animals (Z), as well as other notes and memoranda were presented in 1861.

Dillenius (JOHANNES JACOBUS) [1687-1747]

Dillenius, sometime Botanical Professor at Oxford, whose principal work was an "Historia Muscorum," prepared his own illustrations for the plates: his original drawings for the first 79 plates of that work (the remaining 6 were drawn on the copper direct) form the Banksian MS. No. 56 (B).

His letters written to Brewer in 1726-28 are also preserved (B).

Dinkell (J.)

A number of original drawings, chiefly of fossil vertebrate remains, by J. Dinkell, form part of the Owen Collection of Drawings, presented in 1893 (L).

Dryander (JONAS) [1748-1810]

On Solander's death, Dryander became librarian to Sir Joseph Banks. His manuscripts in connection with the catalogue of Banks' Library, a manuscript catalogue of the original drawings of animals in that library (Z), his manuscript notes for a memoir on the genus *Erica*, an index to the species described by Jacquin in the latter's correspondence with him, copious additions to Solander's MSS. and numerous manuscript lists, including one of the Plants collected by F. Masson in Madeira, as well as his correspondence (in 1 vol.), are preserved in the Museum (B).

Edmonston (THOMAS) [1825-1846]

The young Shetlander, Thos. Edmonston, who was one of the naturalists on board the *Herald*, had specially studied the Flora of Shetland and added the *Arenaria norvegica* to the British Flora. His "Flora of Shetland" was published in 1845, and his autograph notes, begun in 1837, for this work are preserved in the Museum (B).

Edwards (SYDENHAM TEAST). [1769?-1819]

Edwards was a botanical and zoological artist and editor of the "New Botanic Garden." Some of the original drawings for this work were acquired in 1895 and 1896 (B).

Ehret (GEORG DIONYSIUS) [1708-1770]

Ehret came to England about 1740. He furnished illustrations, among other works, for Trew's "Plantæ Selectæ," and P. Browne's "Civil and Natural History of Jamaica," and the original drawings for these illustrations are preserved in the Museum. 65 original water-colour drawings of Plants from the collection of Sir R. More and 4 volumes of original drawings of rare Plants, Fruits, and Seeds, forming the Banksian MSS. No. 16 [106-109], with 22 drawings of Plants collected in Newfoundland by Sir J. Banks (five of which were used for illustrations to Aiton's "Hortus Kewensis"), came with the Banksian library. Of other drawings by Ehret, 180 were purchased in 1877 and a few others in 1878 and 1896. The Museum also possesses an autograph autobiography and other manuscripts of Ehret as well as a "Life" of him in the handwriting of C. J. Trew (B).

Ellis (WILLIAM W.)

Ellis appears to have accompanied Captain Cook on the latter's third voyage to the Pacific in the capacity of artist. 115 original water-colour drawings by him of the animals met with form the Banksian MS. No. 33 (B).

Enniskillen, WILLIAM WILLOUGHBY COLE, 3rd Earl of
[1807-1886]

Besides MSS. relating to his collection of fossil fish, Lord Enniskillen presented in 1885 three transcripts by Mary Anning, the famous fossil-collector of Lyme Regis, of papers in the "Transactions of the Geological Society" with copies in pencil of the plates (G).

Enys (JOHN D.)

A series of 88 autograph letters of J. Ray and his contemporaries (B) were presented by Enys in 1884.

Evans (CALEB) [1831-1886]

Evans made a special study of the geology of the London basin and south of England, and had special opportunities of collecting from sections made during the main drainage works.

His manuscript notes and drawings, in 3 volumes, were presented in 1889 (G).

Evans (Sir JOHN), K.C.B. [1823-]

Sets of the publications of the Linnean Society of London from 1877 and of the Zoological Society of London from 1868 were presented by Sir J. Evans in 1890, and he has given subsequent parts as they appear up to the present time (L).

Falconer (HUGH) [1808-1865]

Falconer served as surgeon on the Bengal Establishment of the Hon. East India Company. In association with his friend Captain Cautley he worked at the Siválik beds. In connection with their joint work on the "Fauna Antiqua Sivalensis," he formed a large collection of drawings, which were presented in 1867 or 1868, and include:—

Sketches for 20 plates of Siválik fauna, including *Colossochelys* and Crocodile; sketches for 18 unpublished plates of Ruminant remains; 53 drawings in water-colour and pen-and-ink of Indian fossils, including sketches for plates: and a collection of 170 drawings in water-colour, pen-and-ink, or pencil, of various fossil Mammalia and a Chelonian, drawn by J. Dinkel, J. J. Kaup, and others (G).

Fleming (JOHN) [-1815]

Indian medical officer and botanist. 13 folio volumes of drawings of Indian Plants that had been the property of Dr. Fleming were purchased in 1882, and are now incorporated in the systematically arranged collection of drawings (B).

Forbes (HENRY OGG) [1851-]

26 original drawings of Sumatran and Javan Plants, made by Forbes during his travels in the Eastern Archipelago, were acquired in 1884 (B).

Forbes (JAMES), A.L.S. [1773-1861]

Jas. Forbes was gardener at Woburn Abbey. A copy of the rare work "*Salicetum Woburnense*," supposed to be mainly the work of Forbes, and privately printed by the Duke of Bedford in 1829, was presented in 1890.

Forster (JOHANN GEORG ADAM) [1754-1794]

J. G. A. Forster went as assistant to his father, J. R. Forster, on the second voyage of Captain Cook to the Pacific. His original water-colour

and pencil drawings of the Animals and Plants observed on that occasion, filling 4 volumes, form the Banksian MSS. No. 6-9 (B and Z).

Franks (SIR AUGUSTUS WOLLASTON) [1826-1897]

In 1880 a copy of W. Smith's large Geological Map of England and Wales (1815) (G) was presented by Sir A. W. Franks.

Gerard (JOHN) [1545-1612]

Besides his "Herbal," Gerard wrote a "Catalogus Arborum . . . ac Plantarum . . . in horto J. Gerardi . . . nascentium . . . 1596," of which rare work a copy in manuscript forms the Banksian MS., No. 89 (B).

Goodenough (SAMUEL), *Bishop of Carlisle* [1743-1827]

The original drawings for the plates to Bishop Goodenough's "Observations on the British species of *Carex*" in the Transactions of the Linnæan Society, vol. ii. and iii., are preserved in the Museum (B).

Gray (JOHN EDWARD) [1800-1875]

Keeper of the Zoological Department from 1840 to 1875, Gray presented in 1861 to that Department 89 volumes of Zoological works and pamphlets, including the manuscript notes by C. R. Darwin, T. Bell, and himself on the Reptiles and Amphibia collected during the voyage of the *Beagle*. He was a constant donor to his department thereafter (Z).

In 1865 he presented the MSS. and botanical drawings of R. A. Salisbury (B).

On his death in 1875 his widow presented many other works and drawings, of which last the most noteworthy are the original water-colour and pen-and-ink drawings of animals made by A. Adams on the voyage of the *Samarang*, and the 65 original water-colour drawings of *Chelonia* by J. de C. Sowerby used for the illustrations in T. Bell's "Monograph of the Testudinata," and Sowerby and Lear's "Tortoises" (Z).

Gronovius or Gronow (LAURENTIUS THEODORUS) [1730-1777]

Gronow was a Senator of Leyden and one of the best ichthyologists of his day. His collection, and a manuscript description of it illustrated by numerous original drawings, were purchased at an auction in London in 1853 (Z). The manuscript was afterwards printed and issued in 1854 as one of the Museum catalogues.

Hansen (GEORGE)

A number of original drawings of monstrous flowers of cultivated Orchids, by G. Hansen, Superintendent of the Foothill Agricultural Experiment Station of the University of California, were purchased about 1890 (B).

Hardwicke (THOMAS), *Major-General in the Indian Army*
[-1835]

Hardwicke formed an extensive collection of illustrations of Asiatic zoology, besides making himself some botanical drawings and notes. The greater part of the collection is the work of native artists; but among the drawings of Fish (in addition to one of the four sets of drawings of Chinese Fish by a native artist that J. Reeves caused to be prepared) are included, some by Major Neeld, others by Major Farquhar, and copies from drawings by Buchanan Hamilton. There is also a series of drawings of Birds by T. W. Lewin.

The collection is composed of the following sets:—

22 original water-colour drawings of Plants made in the north-western provinces of India in 1796, with autograph descriptions (**B**).

56 water-colour sketches of Plants from the neighbourhood of Plettenburg Bay, S. Africa, by "C. H. W." and "I. W. B.," with autograph descriptions by Major-General Hardwicke, 1812 (**B**).

Water-colour drawings of Indian and Chinese animals (**Z**), viz., 194 Mammals, 1,230 Birds, 65 Birds'-nests and eggs, 366 Reptiles, 813 Fish, 545 Insects, 94 Insect larvæ, 58 Insects of Nepaul, 97 Arachnida, 233 Crustacea, 97 Mollusca and Radiata.

Water-colour drawings of animals of various countries (**Z**), viz., 35 Vertebrata and Invertebrata, 118 Mammals, 429 Birds, and 76 Birds by T. W. Lewin.

These sets, which are bound in 32 volumes, were bequeathed by Hardwicke with his specimens to the Museum in 1835, a sum of money being at the same time left to defray the expense of publishing the scientific description of them. The latter intention was, however, frustrated by a Chancery suit, instituted soon after his death. Some of the drawings were used for plates in J. E. Gray's "Illustrations of Indian Zoology," and Jardine and Selby's "Illustrations of Ornithology."

Hodgson (BRYAN HOUGHTON) [1800-1894]

The Indian Civilian and Orientalist, Hodgson, was appointed Assistant Resident and, later, Resident in Nepaul. He made large zoological collections in Nepaul, supplemented by water-colour drawings of the Vertebrata, by native artists. These were sent home and presented to the Museum in 1845 and 1858; the drawings number 1,319 in 7 volumes (**Z**).

Hooker (Sir JOSEPH DALTON), G.C.S.I. [1817-]

Director of the Royal Gardens, Kew, from 1865 to 1885.

Hooker started on his career as Surgeon and Naturalist on the *Erebus*, under Sir J. Ross, during the expedition to the Antarctic regions in 1839-43. Autograph lists of the plants collected, with notes and drawings made during the early part of the expedition (**B**), and 28 water-colour drawings and pencil sketches of Antarctic fish (**Z**), some of which were utilised by Sir J. Richardson in illustrating his zoology of the voyage, are preserved in the Museum.

Hooker (Sir WILLIAM JACKSON) [1785-1865]

Director of the Royal Gardens, Kew, from 1841 to 1865.

The original water-colour drawings by Franz A. Bauer for the plates to Hooker's "Genera Filicum" are preserved in the Museum (**B**).

Horsfield (THOMAS) [1713-1859]

Horsfield practised as a physician in Java and Sumatra from 1799 to 1819, when he became Keeper of the East India Company's Museum in London.

His manuscript lists of Javanese Plants, with letters and 33 original pen-and-ink sketches showing dissections of the new or doubtful genera, 1814-51, that accompanied his collection, are in the Museum (**B**).

Houstoun (WILLIAM) [1695-1733]

Houstoun practised as a surgeon in the West Indies. His manuscript lists and descriptions of West Indian Plants passed, after the death of Philip Miller with whom he corresponded, into the hands of Sir J.

Banks, and form MSS. No. 67-69 (B) of the Banksian collection. The catalogue was published by Banks under the title of "Reliquiæ Houtounianæ" (1781).

Hunter (WILLIAM) [1755-1812]

The well-known Orientalist and Botanist, W. Hunter, was Medical Officer to the East India Company.

His autograph "Outline of a Flora of Prince of Wales' Island" (Penang), is in the Museum (B).

Inwards (RICHARD)

In 1898, Mr. Inwards presented a series of 42 water-colour sketches of fossils obtained near Lake Titicaca, with a map of the district (G). The fossils had already been given in 1880.

Jacquin (NICHOLAUS JOSEPH VON), Baron [1727-1817]

Jacquin, who was a Botanist of note, corresponded with Dryander. His autograph notes and letters, with sketches and water-colour drawings, were included in the Banksian Collection (B).

Jensen (FRITZ)

43 pencil drawings, with manuscript explanations, of the vegetation of Lifu, Loyalty Island, made in 1876 by F. Jensen, were purchased (B).

Johnson (THOMAS) [-1644]

The Botanist and Apothecary, T. Johnson, became a prominent member of the Apothecaries' Company. The Society was in the habit of making botanical excursions, and Johnston published accounts of the results of their expeditions into Kent and to Hampstead Heath. Manuscript transcripts by S. Dale of these, the earliest local Floras known, form the Banksian MS. No. 96 (B).

Judd (JOHN WESLEY), C.B. [1840-]

In 1897, Dr. Judd presented three photographic facsimiles of maps and of a table by W. Smith (G).

Justen (FREDERICK)

In addition to many minor presentations at various times, Mr. Justen gave in 1890 a copy of the rare and valuable "Salictum Woburnense" (B), and in 1896, three volumes containing notes and descriptions, with a few drawings, of Peruvian Plants by A. Mathews (B).

Kaup (JOHANN JACOB) [1803-1873]

Kaup was Inspector of the "Naturalien cabinet" at Darmstadt. His original drawings for the illustrations to his "Catalogue of Apodal Fish in the . . . British Museum," 1856, are preserved in the Museum (Z). Water-colour drawings by him, chiefly of fossil vertebrata remains, are in the Owen Collection (L) and Geological Collection (G) of drawings.

Kerr (WILLIAM) [-1814]

As Botanical Collector for Kew Gardens, Kerr, afterwards Superintendent of the Botanical Garden, Ceylon, visited the Philippines. His autograph journal of a "Botanical Mission to the Island of Luconia in . . . 1805" is in the Museum (B).

Kirby (WILLIAM) [1759-1850]

Two MSS. of the Rev. W. Kirby, the entomologist and joint author with W. Spence of the famous "Introduction to Entomology," are in the

Collection: an autograph MS. entitled "Musæum Entomologicum Barhamense. Pars prima sistens Insecta M. Britanniae indigenæ," which was presented with their collections in 1863 by the Entomological Society, and a manuscript catalogue of British Staphylinidæ in 3 vol. presented by Dr. J. E. Gray in 1869.

Knowlton (THOMAS) [1692-1782]

Knowlton began life as Superintendent of Dr. Sherard's garden at Eltham, and in 1728 entered the service of Richard Boyle, 3rd Earl of Burlington, at Lanesborough, Yorks. He attained eminence as a botanist, and corresponded with many noted contemporaries, including S. Brewer. Knowlton's letters to Brewer between 1728 and 1741 are preserved in the Collection (B).

Køinig (JOHAN GERHARD) [1728-1785]

Køinig, a Danish Medical Missionary in Tranquebar, kept journals of his voyages with lists and descriptions of East Indian (including Siam and Malacca) Plants, Animals, and Minerals. These form the Banksian MSS., No. 37-55 (B). An English translation of such portions as relate to the Straits Settlements appeared in the Journ. Straits Branch Roy. Asiatic Soc., Nos. 26 and 27 (1894).

Lambert (AYLMER BOURKE) [1761-1842]

In 1841, Lambert presented a copy of Cramer's "Papillons exotiques," formerly the property of H. Seymer, by whom it had been annotated and some of the plates re-touched (Z).

At the sale of Lambert's library in 1842 the Museum acquired the MSS. of H. Ruiz Lopez and J. Pavon relating to their botanical exploration of Peru and Chili in 1777-88, and including the journal of the voyage and description of plants (B).

The original drawings by Ferdinand L. Bauer for some of the plates to Lambert's "Genus *Pinus*," with one of the 25 copies of vol. i. coloured by Franz A. Bauer, are preserved (B).

Lee (ANN), Miss [fl. 1769-1779]

Ann Lee, daughter of James Lee, of Hammersmith, the Horticulturist, was an excellent flower-painter.

19 water-colour drawings by her, mostly on vellum, illustrating the genus *Mesembryanthemum*, are preserved in the Museum (B).

Lee (CHARLES)

In 1884, 87 water-colour drawings of Cape Plants by F. Masson (B) were presented by C. Lee, nephew of the foregoing.

Lewin (THOMAS W.)

75 water-colour drawings of Birds by Lewin form part of the Hardwicke Collection of drawings (Z).

L'Héritier de Brutelle (CHARLES LOUIS) [1748-1800]

A series of 51 autograph letters from L'Héritier de Brutelle, one of the most celebrated French Botanists of his time, to Dryander, form one of the Banksian MSS. [No. 101] (B).

Lightfoot (JOHN) [1735-1788]

The Rev. J. Lightfoot, some time Librarian and Chaplain to the Duchess of Portland, and the author of "Flora Scotica," kept a journal

of a botanical excursion made in Wales in 1775, of which a transcript by Solander forms the Banksian MS., No. 86 (B).

Lind (JAMES) [1736-1812]

The Scotch physician J. Lind, visited China in 1766, and accompanied Banks on his voyage to Iceland in 1772, he subsequently became physician to the Royal Household at Windsor.

A holograph "Catalogue of such Chinese and Japanese Plants whose Chinese characters are known and are botanically described: being an Index to find there [*sic*] Chinese characters in Kempfer's *Amœnitates exoticæ*," &c., 1789, addressed to Sir Joseph Banks formed part of the Banksian Collection (B).

Lindley (JOHN) [1799-1865]

An early autograph draft by the celebrated Botanist Lindley for his "Natural System of Botany" is preserved in the Museum (B). 74 water-colour drawings of Plants, by Lindley, were purchased in 1897 (B).

Linné (CARL VON) [1707-1778]

A series of lectures delivered by the great Swedish Naturalist between 1746 and 1749, and written down by L. Montin, form the Banksian MSS., No. 71-75 (B M Z).

Linnean Society of London

Presented, in 1896, 33 miscellaneous works.

Lockhead (WILLIAM) [-1815]

Lockhead was curator of the St. Vincent Botanic Garden.

19 of his original drawings of West Indian Plants are preserved in the Museum (B).

Lonsdale (WILLIAM) [1794-1871]

Lonsdale, who was some time Curator and Librarian to the Geological Society, made a special study of Fossil Corals.

His unpublished autograph, "Report on some Fossil Zoantharia collected by Sir C. Lyell . . . in Madeira and the Islet of Baxio during 1854," is preserved in the Museum (G).

Loureiro (JOÃO DE) [1715-1796]

The Portuguese Jesuit Loureiro, who travelled in Indo-China, and wrote a "Flora Cochinchinensis," sent to England original descriptions of the new genera, that form the Banksian MS., No. 93 (B).

MacGillivray (WILLIAM) [1796-1852]

213 of the original water-colour drawings of British Animals (13 Mammals, 122 Birds, and 78 Fish) executed between 1831 and 1841 by the celebrated Naturalist, W. MacGillivray, who was noted for the care and fidelity of his drawings, were presented in 1892 by his son P. H. MacGillivray (Z).

Maconochie (ALEXANDER)

Capt. Maconochie, R.N., Lieut.-Governor of Norfolk Island, gave to R. Brown a series of autograph "Reports on Norfolk Island," containing natural history observations (B).

Mantell (GIDEON ALGERNON) [1790-1852]

Some water-colour drawings of fossils by the well-known Geologist, Dr. Mantell, are included in the "Catalogue of Fossil Organic Remains in the Cabinet of Mrs. M. H. Smith of Tunbridge Wells," which was presented in 1892 (G).

Martini (BARTOLOMEO)

Martini was author of a "Catalogus Plantarum a me in itinere montis Baldi inventarum," published in 1707.

The manuscript of a further work by him dated 1715, entitled "Catalogo al fasciculo di Monte Baldo delle Piante naturali," is in the Museum (B).

Martyn (JOHN) [1699-1768], and (THOMAS). [1735-1825]

A series of the autograph letters of these Botanists form the Banksian MS. [No. 103] (B).

Massee (GEORGE EDWARD)

Some drawings of Fungi were presented in 1888 by Mr. Massee, now Principal Assistant, Royal Gardens, Kew.

1,036 of his water-colour drawings of Fungi were purchased in 1892 (B).

Masson (FRANCIS) [1741-1805]

The first botanical collector sent out from Kew Gardens was F. Masson, who travelled in South Africa, the Canaries, Azores, Madeira, the West Indies and North America.

A number (about 63) of his water-colour drawings of Plants and Animals made on these expeditions were in the Banksian Collection (B Z).

In 1885, a further series of 87 of his water-colour drawings of Plants were presented by Mr. C. Lee (B).

Mathews (ANDREW) [-1841]

Some notes with a few pencil drawings of Peruvian Plants by the Botanical collector, A. Mathews, forming 3 volumes, were presented by his daughters in 1896 (B).

Maund (BENJAMIN) [1790-1863]

B. Maund combined in his person the callings of chemist, botanist, bookseller, printer, and publisher of "The Botanic Garden."

The original water-colour drawings for this work were presented in 1882 (B).

Miers (JOHN) [1789-1879]

The engineer and botanist, J. Miers, spent many years in South America. His MSS., including "A Catalogue of the Woods of Brazil" and original drawings of South American Plants and their dissections, as well as the works used and annotated by him, were presented by J. W. Miers in 1879 and 1880 (B).

Miller (JOHN), otherwise **Müller** (JOHANN SEBASTIAN)

[1715?-1790?]

Müller, the draughtsman and engraver, came to England in 1744, and was always known after 1760 as John Miller. He published and projected several illustrated works dealing with Plants and Insects.

"A series of 928 drawings [in water-colour] of the leaves, stalks and ramifications of Plants . . . executed for the Earl of Bute, in the years 1783-84," in 5 vols., was purchased in 1880 (B).

Miller (JOHN FREDERICK) [*fl.* 1775-1796]

The son of John Miller (or Müller), J. F. Miller became known as a draughtsman.

He and his brother James were employed by Banks in making finished drawings from S. Parkinson's sketches of the Plants collected during Cook's first voyage round the world: he also accompanied Banks in 1772 to Iceland as botanical artist. His water-coloured drawings so made form part of the Banksian Collection (B).

Montin (LARS)

Certain of Linnæus' lectures delivered between 1746 and 1749, and written down by his pupil L. Montin, form the Banksian MSS. No. 71-75 (B, M, Z), while the journal Montin kept on a journey he made in 1749 to Lapland forms the Banksian MS. No. 83 (B).

Moon (ALEXANDER) [-1825]

37 original water-colour drawings by A. Moon, Superintendent of the Botanic Garden, Ceylon, with autograph descriptions of Ceylon Plants, are preserved in the Museum (B).

Morandi (GIAMBATTISTIA)

Morandi, Knight, of Milan, was author of an "Historia Botanica Practica," etc., 1744: a manuscript draft for this work, said to be in his handwriting, entitled, "Erudimenta Botanica," etc., and illustrated by 133 plates of his original drawings, is preserved (B).

Morris (JOHN) [1810-1886]

226 pamphlets on Geological subjects from the library of Prof. Morris were acquired in 1886 (G).

Moseley (HARRIET), *Miss* [*fl.* 1836-1867]

1,922 original water-colour drawings of British Plants, by Miss Moseley, were purchased 1886 (B).

Moseley (HENRY NOTTIDGE) [1844-1891]

Moseley formed one of the members of the scientific staff of the *Challenger*. His autograph journal of natural history observations made during the voyage was presented by him in 1883 (Z).

Neill (J.)

Neill, who was Deputy Assistant Commissary-General of Albany, King George's Sound, Western Australia, made, at the suggestion of Governor Grey, water-colour drawings of the Vertebrata of the district. 67 of these, some of which illustrate and are referred to in Eyre's "Journals of Expeditions of discovery into Central Australia" (1845), were presented by Mr. Neill in 1845 (Z).

Nodder (FREDERICK POLYDORE) [-1800?]

The botanical draughtsman F. P. Nodder was employed by Banks to make finished drawings, from Parkinson's sketches, of the Plants collected during Cook's first voyage round the world, which drawings form part of the Banksian Collection (B).

Noronha (FERNANDO) [-1787]

The Spanish botanist F. Noronha or Noroña, who did much at Manilla to the Royal Botanic Gardens, subsequently travelled in Java and Madagascar.

A set of 111 water-colour drawings of Java Plants made by him, or for him, of which there is a similar set in the Royal Library at Berlin, were included among the MSS. and drawings of L. A. Deschamps, that were presented by J. R. Reeves in 1861 (B).

Owen (Sir RICHARD), K.C.B. [1804-1892]

Sir R. Owen was Superintendent of the Natural History Departments of the British Museum, 1856-83.

In 1893, Sir R. Owen's executors presented a large series of MSS. and original drawings including:—

The original autograph notes made while dissecting the Pearly Nautilus, the successive drafts for portions of the memoir, the author's interleaved copy of the completed memoir with his autograph notes and other memoranda as well as the original water-colour drawings from which the plates were engraved, and proof impressions of the plates (L).

The set of his manuscript notes and synopsis of lectures from 1828 to 1864 (L).

Notes and sketches of remains of fossil Reptilia in various Museums, made when preparing his British Association Reports on the British Fossil Reptilia (G).

A set of original water-colour drawings by W. Clift, Franz Bauer, Mrs. Marsh and others for the illustrations to Sir E. Home's papers (L).

A very large collection of original drawings by various artists (e.g., G. Scharf, J. Dinkel, J. J. Kamp, Sir E. Landseer, J. Wolf) in water-colour, pen-and-ink and pencil, with photographs, all of zoological and palæozoological subjects, mostly fossil Vertebrata, very many being the originals for illustrations in Sir R. Owen's own works (L).

This collection though mounted and arranged has not yet been catalogued.

Park (MUNGO) [1771-1806]

Afterwards celebrated as an African explorer, Mungo Park went in 1792 as surgeon on board the *Worcester* to Sumatra, where he made botanical and zoological observations. 20 water-colour drawings of Fish executed at the time with manuscript descriptions of six of the species were probably included in the Banksian Collection (Z).*

Parkinson (GEORGE S.)

In 1896, a series of 185 sketches in water-colour, pen-and-ink and pencil by G. Shaw, the zoologist, as well as a portrait of S. Parkinson the artist (L), were presented by Mr. G. S. Parkinson.

Parkinson (SYDNEY) [1745?-1771]

Parkinson accompanied Banks as draughtsman on Cook's first voyage round the world (1768-71).

40 water-colour drawings of animals, mostly on vellum, made from specimens or drawings executed in India, by order of J. G. Loten, and including the originals of some of the figures in Pennant's "Indian Zoology" and "Quadrupeds," formed the Banksian MS. No. 20 (Z).

* Cf. Trans. Linn. Soc. iii. (1797), pp. 33-38.

The large collection in 19 volumes of his water-colour drawings and pencil sketches of Plants and Animals made on the voyage round the world, with finished drawings made from his sketches by T. Burgis, J. Cleveley, Jas. Miller, J. F. Miller and F. P. Nodder, were also acquired with the Banksian Collection (**B, Z**).

A portrait of Parkinson in oils was presented in 1896 (**L**).

Pavon (JOSÉ) [*f*. 1770–1825]

The Spanish botanist, Pavon, accompanied Ruiz Lopez to Peru and Chili.

In addition to the manuscripts named later under Ruiz Lopez, the Museum possesses autograph lists of American and Spanish plants forwarded by Pavon to A. B. Lambert (**B**).

Petiver (JAMES) [—1718]

A set of 73 rough water-colour drawings of Cape Plants, some of which were used for the plates to Petiver's "Gazophyllacium," forms the Banksian MS. No. 88 (**B**).

The copy of Rumph's "D'Amboinische Rariteitkamer," used by Petiver in the preparation of the "Gazophyllacium," and having an interlinear manuscript translation, was transferred in 1889 from the Printed Book Department: it would seem to have previously formed part of Sir Hans Sloane's library (**L**).

Plumier (CHARLES) [1646–1704]

The French botanist and traveller, C. Plumier, was author of many works on American Plants.

312 original water-colour and pen-and-ink drawings of Plants many of which were used in illustrating his published works, form the Banksian MS. No. 1–5 (**B**).

Ponthieu (HENRY DE)

Autograph descriptions of some West Indian Plants, by H. de Ponthieu, a French West Indian Merchant, are preserved in the Museum (**B**).

Pope (CLARA MARIA), *Mrs.* [—1838]

Eleven original water-colour drawings illustrating species and varieties of the genus *Pæonia*, executed in 1821 or 1822 by Mrs. Pope, the artist and flower painter to the Horticultural Society, are preserved in the Museum (**B**).

Pulteney (RICHARD) [1730–1801]

The original autograph of Pulteney's "Catalogue of Plants spontaneously growing about Loughborough," forms the Banksian MS. No. 90 (**B**).

A manuscript "Flora Malabarica, Plantas sistans, quas H. van Rheede Drakenstein . . . præbuit. Synonimis Linnæi, Raii and Rhumphii additis per R. Pulteney," forms the Banksian MS. No. 26 (**B**).

The Museum also possesses his autograph "Catalogue of English Plants," and unpublished "Flora Anglica abbreviata" (**B**).

Ramsay (ROBERT GEORGE WARDLAW-), *Captain*

The Ornithological Library of the Marquess of Tweeddale was presented in 1887 by his nephew, Capt. Wardlaw-Ramsay. The collection comprises 698 works in 2,560 volumes, besides some 200 pamphlets, and is kept for use in the Bird Room (**Z**).

Ray (JOHN) [1627–1705]

88 autograph letters of the celebrated naturalist, J. Ray, and his correspondents, were presented in 1884 (**B**).

The original MS. of Derham's Life of Ray was acquired during the same year (**B**).

Reeves (JOHN) [1774–1856]

J. Reeves, when Inspector of Tea at the East India Company's establishment in Canton, made careful study of the natural history and resources of the country. He employed native artists in making water-colour drawings of the Animals and Plants.

521 of these drawings of Animals (**Z**) and 654 of the Plants (**B**), were presented in 1877 with MSS. notes concerning the drawings of Fish, of which Sir J. Richardson states (Rept. Brit. Assoc., 1845, p. 188), that four sets were made, one of which was given to Major-Gen. T. Hardwicke whose collection of drawings was bequeathed to the Museum in 1835.

Reeves (JOHN RUSSELL) [1804–1877]

J. R. Reeves, the son of John Reeves, was in Hon. East India Company's service at Canton for thirty years and devoted to botany and horticulture.

He presented in 1861 the unpublished autograph journals of L. A. Deschamps, kept on the voyage of the *Recherche* in search of La Pérouse, and during subsequent travels in Java, with the notes for a Flora Javanica and the original sketches of Scenery, Animals and Plants, including 111 water-colour drawings of Java Plants by, or made for F. Noronha (**B, Z**).

On his death, Miss Reeves presented the collection of Chinese drawings which her father, J. Reeves, had formed (**B Z**).

Roemer (JOHANN JACOB) [1763–1819]

210 original drawings, formerly the property of Dr. Roemer, were purchased in 1883 (**B**).

Rothschild (Hon. LIONEL WALTER) [1868–]

Life-size photographs of *Apteryx* and of giant Tortoises were presented in 1897 and subsequent years (**Z G L**) by the Hon. L. W. Rothschild.

Roxburgh (WILLIAM) [1759–1815]

The botanist W. Roxburgh was surgeon on the Madras establishment of the Hon. East India Company and afterwards Superintendent of the Calcutta Botanic Garden.

The manuscript copy of his "Flora Indica," containing autograph notes by him and by Robert Brown that are not in the printed edition; an index to the whole of his botanical MSS.; 14 water-colour drawings of Malayan Plants, with one of a *Cycas* from the Moluccas; and some autograph descriptions, with 22 coloured drawings of Indian Palms and the drawings of the dissections, used in his "Plants of the Coast of Coromandel," are in the Museum (**B**): the last-named was purchased in 1884.

Royal Society of London

The Royal Society presented, in 1886, 34 miscellaneous works, and, in 1891, 227 geological and palæontological pamphlets (**G**), as well as, by request of H. B. Brady, a copy of Soldani's rare work "Testaceographiæ ac Zoophytographiæ . . . tomus primus (– secundus)" (**L**).

Ruiz Lopez (HIPÓLITO) [1754–1815]

The Spanish botanist, Ruiz Lopez, was appointed to conduct an expedition for the botanical exploration of Peru and Chili in 1777. He was accompanied by J. Pavon, and the two returned in 1788.

Their joint manuscript descriptions of the Plants procured, which formed the basis for their "Flora Peruviana et Chilensis," with Ruiz Lopez's autograph "Relacion historica del Viage" and his important manuscripts on Cinchona, were purchased at the sale of the Lambert Library in 1842 (B).

Russell (ANNA), Mrs. [1807–1876]

730 of her original water-colour drawings of the higher Fungi were bequeathed by Mrs. Russell in 1876, and 5 more were presented in 1886 (B).

Salisbury (RICHARD ANTHONY) [1761–1829]

R. A. Salisbury, the botanist, left his property to W. J. Burchell the explorer, on whose decease in 1863 the MSS. and drawings passed into the hands of Dr. J. E. Gray, by whom they were given to the Museum (B) in 1865.

Salisbury's notes and drawings of Ericaceous Plants were transferred from the Royal Gardens at Kew in 1881 (B).

Salter (JOHN WILLIAM) [1820–1869]

J. W. Salter, the palæontologist, was apprenticed at the age of 15 to James De Carle Sowerby and when working with him prepared illustrations for the supplement to his English Botany. These original drawings were acquired with Sowerby's in 1862 (B).

Saunders (WILLIAM WILSON) [1809–1879]

A number of drawings and engravings of Plants collected by W. W. Saunders were acquired in 1880 (B).

Scharf (GEORGE) [1788–1860]

A number of original drawings, chiefly of fossil vertebrate remains, by G. Scharf, form part of the Owen Collection of Drawings, presented in 1893 (G and L).

Schleiden (MATTHIAS JAKOB) [1804–1881]

A series of original water-colour and pen-and-ink drawings of Plants, by M. J. Schleiden, Professor of Botany at Jena, with manuscript descriptions of them, the whole bound in 9 volumes, were purchased in 1886 (B).

Schmidt (JOHANN CARL) [1793–1850]

The Museum possesses an autograph work by J. C. Schmidt, the Curator of the Shuttleworth Herbarium at Bern, entitled:—"Beschreibung der innlandischen Arten von *Cuscuta*" (B).

Schomburgk (Sir ROBERT HERMANN) [1804–1865]

Sir R. H. Schomburgk, the traveller, acted as Commissioner for delineating the boundary between British Guiana and Venezuela in 1841–43.

A manuscript of his memoir "On the Forest Trees of British Guiana and their uses," etc., read before the British Association in 1844, and subsequently to the Linnean Society, and printed by that Society in its proceedings, is preserved in the Museum (B).

A series of 248 original water-colour drawings of Plants of British Guiana was presented in 1847 in part by Sir Robert himself, and in part by the Secretary of State for the Colonies, Earl Grey (**B**).

Seyffert (HEINRICHUS CHRISTOPHORUS)

133 original water-colour drawings of Fungi, by H. C. Seyffert, a physician at Pössneck, from the Banksian MS. No. 65 (**B**).

Seymer (HENRY) [1745–1800]

A copy of Cramer's "Papillons exotiques" which had belonged to H. Seymer of Hanford, Dorset, who had added the Linnean names and retouched several of the coloured plates, was presented by A. B. Lambert in 1841 (**Z**).

Shaw (GEORGE) [1751–1813]

185 of his original water-colour, pen-and-ink and pencil sketches, by G. Shaw, Keeper of the Natural History Section of the British Museum, 1807–13, were presented in 1896 (**L**).

Sherard (WILLIAM) [1659–1728]

W. Sherard, the Botanist who was Consul at Smyrna, contributed some notes and observations on the first two volumes of Ray's "Historia Plantarum" and his MSS. endorsed by Ray, from the Banksian MS. No. 80 (**B**).

Simpson (MARTIN) [1799–1892]

M. Simpson, the Geologist, was author of several works on the geology and palæontology of Yorkshire.

His original drawings of Belemnites for his book on "The Fossils of the Yorkshire Lias," consisting of 8 unpublished plates, were presented in 1899 (**G**).

Sloane (Sir HANS) [1660–1753]

The original manuscript catalogues of the natural history collections of Sir H. Sloane, 15 volumes in all, the copy of his "Voyage to the Islands Madera, Barbados . . . and Jamaica," &c., annotated in his own hand-writing, the original drawings for the plates to that work (bound up with the specimens from which they were made in the 8 volumes of Sloane's Jamaica Herbarium) and his copy of Ray's "Historia Plantarum," with marginal references to his herbarium, and autograph addenda, may be said to have formed the nucleus of the present Natural History Library (**B, G, M**).

Some works containing manuscript notes by J. Petiver probably once formed part of his library (**B L**).

A series of pen-and-ink drawings with autograph descriptions by G. J. Camellus, entitled "Descriptiones Fruticum et Arborum Luzonis," etc., from Sir H. Sloane's library, was transferred from the MSS. Department in 1884.

Smith (CHRISTIAN) [1785–1816]

A manuscript biography of Christian Smith, Prof. of Botany at the University of Christiania, who travelled in the British Isles, to Madeira and Tenerif and lost his life on Tuckey's Congo Expedition in 1816, is preserved in the Museum (**B**).

Smith (CHARLES HAMILTON) [1776–1859]

Smith's original MS. on "Horses, the Equidæ or genus *Equus* of authors," illustrated with 100 water-colour drawings, is preserved in the Museum (Z). It formed the basis for the volume in the "Naturalists' Library."

Smith (CHRISTOPHER) [—1806?]

183 original water-colour drawings of Plants from the Straits Settlements by C. Smith, Superintendent, Botanic Gardens, Moluccas, were acquired in 1885 (B).

Smith (EDWIN DALTON) [*Jl.* 1823–1832]

56 original water-colour drawings by E. D. Smith for the illustrations to R. Sweet's "Flora Australasica" are preserved in the Museum (B).

Smith (WILLIAM) [1769–1839]

Of the few but valuable maps, or their facsimiles, and memoirs by W. Smith, "The Father of English Geology," the Museum possesses (G):—

1. "Observations on . . . Water Meadows . . . with an account of Prisley Bog," 1806.

2. Photograph of the original MS., in the possession of the Geological Society, of a Table of the "Order of Strata and their embedded Organic remains, in the vicinity of Bath, examined and proved prior to 1799." This was dictated by Smith and written down by the Rev. Benjamin Richardson at the house of the Rev. J. Townsend in 1799. It was revised and printed in the "Memoir to the Map" in 1815. This facsimile was presented to the Museum in 1897 by Prof. J. W. Judd.

3. A coloured photographic reproduction of "A map of five miles round the City of Bath, on a scale of one inch and half to a mile . . . 1799," geologically coloured the same year by W. Smith, of which the original is in the possession of the Geological Society, presented in 1897 by Prof. J. W. Judd.

4. A coloured photographic reproduction of the "General Map of Strata found in England and Wales . . . 1801" [Scale 1 in. = 37 m. about], taken from the original in the possession of the Geological Society, presented in 1897 by Prof. J. W. Judd.

5. A geological map begun in 1812 and completed in 1815 entitled, "A delineation of the Strata of England and Wales with part of Scotland" [Scale 1 in. = 5 m.], presented in 1880 by Mr. (afterwards Sir) A. W. Franks.

6. "A Memoir to the Map," etc., 1815.

7. "A new Geological Atlas of England and Wales" [Scales from 1¼ to 3½ m. = 1 in.], Pt. i.-iii. and vi. [Besides Pt. iv. and v. the maps of Wilts, Cumberland and Westmoreland are wanting.] Purchased 1889.

8. "Strata identified by Organized Fossils," 1816.

9. "Stratigraphical System of Organized Fossils," 1817.

10. Six coloured geological views and sections across various parts of England and Wales, 1817–19, formerly in the library of Smith's nephew, J. Phillips (afterwards Professor of Geology at Oxford), presented by W. Topley in 1887.

11. A new Geological Map of England and Wales" [Scale 1 in. = 15 m.], 1827. Presented, in 1884, by W. Carruthers, who notes that it is identical with editions dated 1820 and 1828.

12. "Synopsis of Geological Phenomena," 1832.

In 1872 "A Book about W. Smith, LL.D., and the Somersetshire Coal-Canal," was projected by W. S. Mitchell; his notes and photographs with geologically coloured keys were purchased, circa 1890 (G).

Smith (WORTHINGTON GEORGE) [1835-]

In 1886 Mr. Worthington G. Smith presented a set of proofs on India paper of his illustrations to J. Stevenson's "Hymenomyces Britannici" (B).

A large series (upwards of 1,500) of water-colour drawings of Fungi, as well as a complete series of the British Hymenomyces; 39 water-colour drawings of British Orchidaceæ, and 26 plates of pen-and-ink drawings of Pollen Grains, executed by Mr. Smith are in the Botanical Department Collection of Drawings, or exhibited in the Public Gallery (B).

Society of Antiquaries

Presented, in 1895, 38 miscellaneous works.

Solander (DANIEL CHARLES) [1736-1782]

Solander, the Swedish botanist, and pupil of Linnæus, became Assistant Librarian at the British Museum and at the same time acted as librarian to Sir J. Banks. He accompanied the latter on Capt. J. Cook's first voyage round the world (1768-71), and the complete set of his autograph notes made during that voyage, from the original rough notes to the completed descriptions, with lists of the various local faunas and floras are preserved (B Z), as well as a series of lists of the Plants collected by W. Anderson during Cook's third voyage (1776-80) in the order in which they were arranged in the drying books in which they were brought home (B).

A "Florula Indiæ Occidentalis" and a "Florula Capensis" contain complete lists of the then known species from those regions (B).

A descriptive slip-catalogue of Animals and Plants,* which was intended to embrace all species then known, systematically arranged and kept in Solander cases, has since been bound and occupies, Animals 27 (Z), and Plants 25 volumes (B).

Lists and descriptions by Solander of the Plants (B), and Fish (Z), obtained during the visit with Banks to Iceland in 1772, as well as many other manuscripts written in connection with his curatorship of the Banksian Museum, came with those before mentioned in that Collection.

Many of the above manuscripts are interspersed with notes in Banks' handwriting.

Soldani (AMBROGIO) [1733-1808]

A copy of Soldani's rare work "Testaceographiæ ac Zoophytographiæ parvæ et microscopiæ tomus primus (-secundus)," was by bequest of H. B. Brady presented by the Royal Society in 1891 (L).

Sowerby (JAMES) [1757-1822]

James Sowerby, naturalist and artist, illustrated many works on natural history.

His original drawings for Plates i., ii. and xii. of Aiton's "Hortus Kewensis," form part of the Banksian MS. No. 17 (B).

* The Plant Catalogue practically formed the base of Aiton's "Hortus Kewensis" and also relates to the Banksian Herbarium.

The original drawings for No. 2-4 of Dickson's "Fasciculus Plantarum Cryptogamarum Britannia," form the Banksian MS. No. 21 (B).

The original water-colour drawings for the "English Botany," over 2,500 in number, were purchased in 1859 (B).

The original water-colour drawings for his "English Fungi," were presented in 1876, and have been incorporated in the collection of drawings of Fungi (B).

Sowerby (JAMES DE CARLE) [1787-1871]

James De Carle Sowerby was well known both as a naturalist and artist.

His original water-colour drawings for the illustrations to the "Supplement to English Botany" were purchased in 1862 (B).

29 plates of original water-colour drawings of mosses, dated 1803, from which the plates to Dawson Turner's "Musculogiae Hibernicae Spicilegium" were engraved, were purchased in 1866 (B).

The set of 65 original water-colour drawings of Chelonia to illustrate J. Bell's "Monograph of the Testudinata," and subsequently utilised for Sowerby and Lear's "Tortoises," was presented in 1875 (Z).

Spaendonck (GERRIT VAN) [1746-1822]

70 water-colour drawings of Flowers after Nature, by G. Spaendonck, the celebrated botanical artist at the Jardin des Plantes, Paris, were purchased in 1885 (B).

Stephens (WILLIAM) [*f.* 1718-1732]

A "Catalogus Plantarum in Horto Dubliniensi," in part in the handwriting of W. Stephens, Botanist and Lecturer at Trinity College, Dublin, forms the Banksian MS. No. 92 (B).

Sweet (ROBERT) [1783-1835]

The 56 original water-colour drawings by E. D. Smith for Sweet's "Flora Australasica" are preserved in the Museum (B).

Thunberg (CARL PEHR) [1743-1822]

An autograph "Flora Capensis" made some time prior to 1782 by the celebrated Swedish naturalist Thunberg (that is of interest as showing the state of the work at that time as contrasted with its extension when first published in 1820), with a transcript in Dryander's handwriting, were among the Banksian MSS. (B).

Tilli (MICHAEL ANGELUS) [1655-1740]

An autograph "Specimen Plantarum quae in Horto Medico Sapientiae Pisanae locisque finitimis extant" 1713-30 (3 vol.), by M. A. Tilli, Professor of Botany at Pisa, forms the Banksian MS. [No. 111], (B).

Topley (WILLIAM) [1841-1894]

A set of the six views and geological sections of various parts of England and Wales, made by W. Smith in 1817-19 (G), was presented in 1887 by W. Topley, the Geologist.

Tournefort (JOSEPH PITTON DE) [1656-1708]

A copy of the manuscript of the celebrated French Botanist Tournefort, entitled "Catalogue des Plantes que M. P. de Tournefort trouva dans ses voyages d'Espagne et de Portugal," forms the Banksian MS., No. 82 (B).

Toynbee (*Mrs.* HENRY)

189 original water-colour drawings of Marine Animals and Plants made by Mrs. Toynbee during voyages between England and India, via the Cape, in 1856-58, with manuscript notes, were presented in 1895 by Capt. H. Toynbee (Z).

Tweeddale, ARTHUR HAY, *9th Marquess of* [1824-1878]

The Marquess of Tweeddale, traveller and ornithologist, formed an extensive library, which, numbering 698 works in 2,560 volumes with about 200 pamphlets, was presented by his nephew, Capt. R. G. Wardlaw-Ramsay, in 1887 (Z). This collection is kept for use in the Bird Room.

Upsala Royal University

187 dissertations dealing with natural history subjects, and usually very difficult to obtain, were presented by the Royal University of Upsala in 1896. The University has since from time to time given other similar publications.

Watelet (ADOLPHE) [1811-1879]

Watelet, the palæobotanist, was author of a "Description des Plantes fossiles du bassin de Paris," 1866. The original pencil drawings for the plates to that work, with 21 additional unpublished ones, and their descriptions in manuscript, were purchased in 1880 (G).

Watling (THOMAS)

Watling was sent out to New South Wales by J. Lee to collect plants. 71 foll. of water-colour drawings of Natives, Animals, and Plants from the neighbourhood of Port Jackson form the Banksian MS., No. 34 (B). Some of these are the originals used in drawing the plates for J. White's "Journal of a Voyage to New South Wales" (1790). A further and very extensive series made between 1788 and 1792, and containing some figures of Birds that formed the types of J. Latham's descriptions in the supplement to his "General Synopsis of Birds," was purchased in 1902 (Z).

Watson (HEWETT COTTRELL) [1804-1881]

The manuscript records used in the compilation of Watson's "Cybele Britannica" were presented in 1887 (B).

Wheeler (EDWIN), *of Clifton* [1833-]

2,449 water-colour drawings of British Fungi, made between 1880 and 1895 by Mr. Wheeler, were presented in 1895 (B).

White (JOHN) [1788-96]

White went as surgeon-general to Botany Bay. The original drawings by T. Watling used for some of the plates of White's "Journal of a Voyage to New South Wales" are included in the Banksian MS. No. 34 (B).

Wigg (LILLY) [1749-1828]

An autograph "Catalogue of Esculent Plants," 1810, by L. Wigg, botanist, of Great Yarmouth, is preserved in the Museum (B).

Wilson (WILLIAM) [*f.* 1799-1871]

W. Wilson, the botanist, was author of "Muscologia Britannica." His original drawings and notes, as well as his correspondence (filling

12 volumes) relating to Mosses, were purchased with his Herbarium in 1874 (B).

Windt (L. E.)

A manuscript on "The Barberry Bush, an enemy to Winter Corn," 1806, translated from the German original of L. E. Windt, that was published 1806, is in the Museum (B).

Wolf (JOSEF) [1820-1899]

Original water-colour drawings of the Aye-aye, by Wolf, are included in the Owen Collection of Drawings (L).

Woodward (SAMUEL PICKWORTH) [1821-1865]

A manuscript, "Catalogue of Fossil Organic Remains in the Cabinet of Mrs. M. H. Smith, of Tunbridge Wells," 1845, with water-colour drawings by S. P. Woodward (who compiled the Catalogue), W. H. Bensted, and others, was presented in 1892 (G).

Some original drawings by Woodward are included in the Davidson collection of drawings of Brachiopoda, which was presented in 1886 (G).

Young (WILLIAM) [fl. 1753-1784]

302 water-colour drawings of Plants from North and South Carolina made in 1767 by W. Young, with manuscript title, index, and dedication, form the Banksian MS. No. 24 (B).

4. LIST OF CURRENT SERIAL PUBLICATIONS PRESENTED TO THE BRITISH MUSEUM (NATURAL HISTORY).

	Date when presentation began.	Initial of Library in which the Serial is kept.
A.—BRITISH ISLANDS.		
ABERDEEN.		
<i>University of Aberdeen.</i>		
Calendar. 1894-5→	1894	L
ALNWICK.		
<i>Berwickshire Naturalists' Club.</i>		
History. Vol. ix→	1887	L
BARROW-IN-FURNESS.		
<i>Barrow Naturalists' Field Club.</i>		
Annual Report. Vol. xv→	1902	L
BATH.		
<i>Natural History and Antiquarian Field Club.</i>		
Proceedings. Vol. vi, pt. 2→	1888	L
BELFAST.		
<i>Belfast Natural History and Philosophical Society.</i>		
Report and Proceedings. 1871-2→	1887	L
<i>Belfast Naturalists' Field Club.</i>		
Annual Report and Proceedings. New Series. Vol. iii, No. 5→	1892	L

		Date when presentation began.	Initial of Library in which the Serial is kept.
BIRMINGHAM.			
	<i>Birmingham Natural History and Philosophical Society.</i>		
	Proceedings. Vol. vi—>	1889	L
BRIGHTON.			
	<i>Avicultural Society.</i>		
	Avicultural Magazine. Vol. i (1894)—>	1895	Z
	<i>Brighton and Hove Natural History and Philosophical Society.</i>		
	Annual Report. 1892—>	1892	L
BRISTOL.			
	<i>Bristol Naturalists' Society.</i>		
	Proceedings. Series III, vol. v, pt. 3—>	1888	L
BURTON-ON-TRENT.			
	<i>Burton-on-Trent Natural History Society.</i>		
	Transactions. Vol. i—>	1894	L
CAMBRIDGE.			
	<i>Cambridge Philosophical Society.</i>		
	Transactions. Vol. xiv—>	1885	L
	Proceedings. Vol. v, pt. 2—>	1885	L
	<i>University of Cambridge.</i>		
	Annual Report of the Museums and Lecture Rooms Syndicate. No. 1—>	1896	L
CARDIFF.			
	<i>Cardiff Naturalists' Society.</i>		
	Report and Transactions. Vol. xix, pt. 2—>	1888	L
CHELTENHAM.			
	<i>Cheltenham College Natural History Society.</i>		
	Report of the Proceedings. 1895—>	1896	L
CHESTER.			
	<i>Chester Society of Natural Science.</i>		
	Annual Report. No. 17—>	1888	L
	Proceedings. No. 4—>	1894	L
CROYDON.			
	<i>Croydon Microscopical and Natural History Club.</i>		
	Proceedings. 1884-6—>	1886	L
DORCHESTER.			
	<i>Dorset Naturalists' Field Club.</i>		
	Proceedings. Vol. xx—>	1900	L
DOUGLAS, ISLE OF MAN.			
	<i>Isle of Man Natural History and Antiquarian Society.</i>		
	Yn Lioar Manninagh. Vol. i—>	1889	L
DUBLIN.			
	<i>Royal Dublin Society.</i>		
	Scientific Transactions. Vol. iii, no. 14—>	1888	L
	Scientific Proceedings. Vol. v, no. 7—>	1888	L
	Economic Proceedings. Vol. 1—>	1900	L
	<i>Royal Irish Academy.</i>		
	Transactions. Vol. xxix, pt. 2—>	1888	L
	Proceedings. Ser. II, vol. iv, pt. 6—>	1888	L
	<i>University of Dublin.</i>		
	Notes from the Botanical School of Trinity College. No. 1—>	1896	B
	Calendar. 1882—>	1888	L
	<i>University of Ireland.</i>		
	Calendar. 1889—>	1889	L

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DUMFRIES.		
<i>Dumfriesshire and Galloway Natural History and Antiquarian Society.</i>		
Transactions. 1886-7→	1888	L
EALING.		
<i>Ealing Natural Science and Microscopical Society.</i>		
Annual Report. No. 5→	1888	L
EASTBOURNE.		
<i>Eastbourne Natural History Society.</i>		
Transactions. New Series. Vol. ii, pt. 2→	1889	L
EDINBURGH.		
<i>Edinburgh Field Naturalists' and Microscopical Society.</i>		
Transactions. Vol. i→	1889	L
<i>Edinburgh Geological Society.</i>		
Transactions. Vol. vi→	1893	G
<i>Fishery Board for Scotland.</i>		
Annual Report. No. 3→	1886	Z
<i>Royal Physical Society.</i>		
Proceedings. Vol. ix, pt. 3→	1889	L
<i>Royal Scottish Geographical Society.</i>		
Scottish Geographical Magazine. Vol. iv, no. 3→	1888	L
<i>Royal Society of Edinburgh.</i>		
Transactions. Vol. xxxiii. pt. 2→	1888	L
Proceedings. Vol. xiv, no. 125→	1888	L
<i>University of Edinburgh.</i>		
Calendar. 1888-9→	1888	L
EPSOM.		
<i>Epsom College Natural History Society.</i>		
Report. No. 1→	1894	L
FALMOUTH.		
<i>Royal Cornwall Polytechnic Society.</i>		
Annual Reports. No. 55→	1888	L
FELSTED.		
<i>Felsted School Natural History Society.</i>		
Report. No. 1→	1888	L
FOLKESTONE.		
<i>Folkestone Natural History Society.</i>		
Proceedings. No. 1→	1886	L
GLASGOW.		
<i>Geological Society.</i>		
Transactions. Vol. viii→	1890	G
<i>Natural History Society.</i>		
Transactions. New Series, vol. ii→	1888	L
<i>Philosophical Society.</i>		
Proceedings. Vol. xviii→	1888	L
<i>University of Glasgow.</i>		
Calendar. 1894-5→	1894	L
GLOUCESTER.		
<i>Cotteswold Naturalists' Field Club.</i>		
Proceedings. Vol. ix, pt. 2→	1888	L
HALIFAX, Yorks.		
<i>Halifax Naturalist.</i> Vol. i→	1896	L

		Date when presentation began.	Initial of Library in which the Serial is kept.
HEREFORD.			
	<i>Woolhope Naturalists' Field Club.</i>		
	Transactions. 1881-2→	1888	L
HULL.			
	<i>Hull Scientific and Field Naturalists' Club.</i>		
	Transactions. Vol. i→	1899	L
IPSWICH.			
	<i>Suffolk Institute of Archaeology and Natural History.</i>		
	Proceedings. Vol. x, pt. 3→	1901	L
KEW.			
	<i>Kew Guild.</i>		
	Journal. 1893→	1893	B
	<i>Royal Gardens.</i>		
	Bulletin. Vol. i→	1887	B
LEEDS.			
	<i>Geological Association.</i>		
	Transactions. Vol. i→	1886	G
	<i>Leeds Philosophical and Literary Society.</i>		
	Reports. No. lxi→	1891	L
	<i>Yorkshire Geological and Polytechnic Society.</i>		
	Proceedings. Vol. viii→	1890	G
LIVERPOOL.			
	<i>Liverpool Biological Society.</i>		
	Proceedings. Vol. i→	1889	L
	<i>Liverpool Geological Association.</i>		
	Transactions. Vol. vii→	1889	G
	<i>Liverpool Geological Society.</i>		
	Proceedings. Vol. iii→	1889	G
	<i>Liverpool Museums.</i>		
	Bulletin. Vol. i→	1897	L
	<i>University of Liverpool.</i>		
	Calendar. 1901-2→	1902	L
LONDON.			
	<i>Admiralty.—Hydrographical Department.</i>		
	Admiralty Charts	1887	L
	<i>Board of Agriculture.</i>		
	Journal. Vol. i→ (2 copies)	1894	B, Z
	<i>Chemical News.</i> Vol. lviii→	1888	M
	<i>Chemical Society.</i>		
	Journal. Vol. lv→	1889	M
	Proceedings. Vol. v→	1890	M
	<i>City of London College Science Society.</i>		
	Journal. No. 4→	1889	L
	<i>City of London Entomological and Natural History Society.</i>		
	Transactions. 1891→	1892	L
	<i>Climate.</i> Vol. i→	1900	L
	<i>Entomological Society.</i>		
	Transactions. 1899→	1899	Z
	<i>Geological Society.</i>		
	Quarterly Journal. Vol. xlv→	1889	G
	<i>Geological Survey.</i>		
	[Memoirs]		G
	[The Maps are now supplied by the Ordnance Survey]		

	Date when presentation began.	Initial of Library in which the Serial is kept.
LONDON—continued.		
<i>Geologists' Association.</i>		
Proceedings. Vol. viii→	1885	G
<i>Journal of Tropical Medicine.</i> Vol. iv→	1901	L
<i>Linnean Society.</i>		
Proceedings. Session 1887-8→	1890	L
Journal (Botany). Vol. xxiii→	1888	B
„ (Zoology). Vol. xx→	1888	Z
Transactions (Botany). Series II., vol. iii→	1888	B
„ (Zoology). Series II., vol. iv→	1888	Z
<i>London, Edinburgh and Dublin Philosophical Magazine.</i>		
Vol. xxv→	1888	M
<i>Mineralogical Society.</i>		
Mineralogical Magazine. Vol. viii→	1888	M
<i>Odontological Society.</i>		
Transactions. Vol. xxxv→	1902	L
<i>Paleontographical Society.</i>		
Monographs. Vol. xxxvii→	1883	G
<i>Pharmaceutical Society.</i>		
Journal. Vol. ?→	?	B
<i>Royal Botanic Society.</i>		
Quarterly Record. 1880→	1892	B
<i>Royal Colonial Institute.</i>		
Journal. Vol. xxiv→	1893	L
<i>Royal Geographical Society.</i>		
Proceedings. Vol. x, pt. 3—xiv [cont. as] }	1888	L
The Geographical Journal. Vol. i→ }		
Supplementary Papers. Vol. ii, no. 2→		
Year Book. 1898→		
<i>Royal Horticultural Society.</i>		
Journal. Vol. i→	1889	B
<i>Royal Institution.</i>		
Proceedings. Vol. xii→	1888	L
<i>Royal Microscopical Society.</i>		
Journal. Vol. i→	1882	L
<i>Royal Society of London.</i>		
Philosophical Transactions. Vol. 178→	1888	L
Proceedings. Vol. xliii→	1888	L
Year Book. 1896-7→	1897	L
<i>Selborne Society.</i>		
Nature Notes. Vol. i→	1890	L
<i>Society of Arts.</i>		
Journal. Vol. xl→	1891	L
<i>South-Eastern Union of Scientific Societies.</i>		
South-Eastern Naturalist. 1900→	1902	L
<i>South London Entomological and Natural History Society.</i>		
Proceedings. 1879→	1888	L
<i>Surveyors' Institution.</i>		
Transactions. Vol. xxvi→	1893	L
<i>University of London.</i>		
Calendar		L
<i>Victoria Institute.</i>		
Journal of the Transactions. Vol. xx→	1888	L

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LONDON— <i>continued.</i>		
<i>Zoological Society.</i>		
Proceedings. 1830→	1875	Z
Transactions. Vol. i→	1861	Z
MANCHESTER.		
<i>Conchological Society of Great Britain and Ireland.</i>		
Journal of Conchology. Vol. vi→ (2 copies)	1892	G, Z
<i>Literary and Philosophical Society.</i>		
Memoirs. Series IV, vol. vii, no. 2→	1895	L
<i>Manchester Field Naturalists' and Archæologists' Society.</i>		
Report. 1860→	1896	L
<i>Manchester Geological Society.</i>		
Transactions. Vol. xxi→	1891	G
<i>Manchester Microscopical Society.</i>		
Transactions. 1884→	1889	L
<i>Manchester Museum.</i>		
Notes. No. 1→	1897	L
Report. 1889-90→	1895	L
MARLBOROUGH.		
<i>Marlborough College Natural History Society.</i>		
Report. No. 35→	1890	L
NEWCASTLE-UNDER-LYNE.		
<i>North Staffordshire Naturalists' Field Club.</i>		
Annual Report. 1887→	1887	L
NEWCASTLE-UPON-TYNE.		
<i>Natural History Society of Northumberland, Durham and Newcastle-upon-Tyne.</i>		
Natural History Transactions. Vol. viii, pt. 3→	1889	L
NORTHAMPTON.		
<i>Northamptonshire Natural History Society and Field Club.</i>		
Journal. Vol. i→	1883	L
NORWICH.		
<i>Norfolk and Norwich Naturalists' Society.</i>		
Transactions. Vol. iv, pt. 3→	1892	L
<i>Norwich Castle Museum.</i>		
Report. 1894→	1901	L
OXFORD.		
<i>Oxford University Junior Scientific Club.</i>		
Journal (afterwards Transactions). Vol. 4→	1894	L
<i>University of Oxford.</i>		
Annual Report of the Delegates of the University		
Museum. No. 1→	1894	L
Calendar. 1892→	1892	L
PENZANCE.		
<i>Natural History and Antiquarian Society.</i>		
Report. 1892-3→	1894	L
PERTH.		
<i>Perthshire Society of Natural Science.</i>		
Transactions and Proceedings. Vol. i, pt. 2→	1892	L
PLYMOUTH.		
<i>Devonshire Association.</i>		
Transactions. Vol. xxi→	1889	L

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PLYMOUTH—continued.		
<i>Marine Biological Association.</i>		
Journal. Vol. i→	1888	L
<i>Municipal Museum and Art Gallery.</i>		
Report. No. 1→	1900	L
READING.		
<i>Reading Literary and Scientific Society.</i>		
Report. 1887→	1897	L
ROCHESTER.		
<i>Rochester Naturalists' Society.</i>		
Rochester Naturalist. Vol. i, no. 20→	1888	L
RUGBY.		
<i>Rugby School Natural History Society.</i>		
Report. 1887→	1888	L
ST. PETER'S PORT, Guernsey.		
<i>Guernsey Society of Natural Science.</i>		
Report. 1882→	1889	L
SHREWSBURY.		
<i>Caradoc and Severn Valley Field Club.</i>		
Transactions. Vol. i→	1899	L
Caradoc Record of Bare Facts. 1891→	1899	L
<i>Shropshire Archæological and Natural History Society.</i>		
Transactions. Vol. xi, pt. 2→	1888	L
SOUTHAMPTON.		
<i>Ordnance Survey.</i>		
Map of the British Islands on the scale of 1 in. = 1 m.	1887	L
— Geologically coloured	1902	G
SOUTHPORT.		
<i>Southport Society of Natural Science.</i>		
Report. No. 1→	1892	L
STANHOPE.		
<i>Weardale Naturalists' Field Club.</i>		
Transactions. Vol. i→	1901	L
STIRLING.		
<i>Stirling Natural History and Archæological Society.</i>		
Transactions. No. 1→	1884	L
STRATFORD.		
<i>Essex Field Club.</i>		
Essex Naturalist. Vol. i→	1887	L
TAUNTON.		
<i>Somersetshire Archæological and Natural History Society.</i>		
Proceedings. Vol. xxx→	1888	L
WATFORD.		
<i>Hertfordshire Natural History Society.</i>		
Transactions. Vol. i→	1881	L
WELLINGTON.		
<i>Wellington College Natural History Society.</i>		
Annual Report. Vol. xvii→	1888	L
WINCANTON.		
<i>Wincanton Field Club.</i>		
Annual Report. No. i→	1901	L
YORK.		
<i>Yorkshire Philosophical Society.</i>		
Annual Report. 1823→	1886	L

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B.—BRITISH EMPIRE OVER THE SEAS.

I. AUSTRALIAN COMMONWEALTH.

<i>Australasian Association.</i>			
Report. Vol. i→	. . . . .	1891	L
ADELAIDE.			
<i>Public Library, Museum and Art Gallery.</i>			
Report. 1884-5→	. . . . .	1892	L
<i>Royal Society of South Australia.</i>			
Transactions. Vol. i→	. . . . .	1884	L
Memoirs. Vol. i→	. . . . .	1900	L
BRISBANE.			
<i>Department of Agriculture.</i>			
Queensland Agricultural Journal. Vol. i→	. . . . .	1897	Z
Annual Report. 1892→	. . . . .	1894	Z
<i>Queensland: Geological Survey.</i>			
Bulletin. No. 1→	. . . . .	1895	G
Annual Progress Report. 1900→	. . . . .	1901	G
Reports. 1891→	. . . . .	1891	G
<i>Queensland Museum.</i>			
Annual Report. 1876→	. . . . .	1897	L
Annals. No. 1→	. . . . .	1896	L
<i>Royal Society of Queensland.</i>			
Proceedings. Vol. i→	. . . . .	1885	L
HOBART.			
<i>Royal Society of Tasmania.</i>			
Papers, Proceedings and Report. Vol. i→	. . . . .	1885	L
MELBOURNE.			
<i>Department of Agriculture, Victoria.</i>			
Journal. Vol. i→	. . . . .	1902	Z
Bulletin. Vol. i→	. . . . .	1902	Z
<i>Geological Survey of Victoria.</i>			
Bulletin. No. 1→	. . . . .	1903	G
Memoirs. No. 1→	. . . . .	1903	G
<i>Public Library, Museums and National Gallery of Victoria.</i>			
Report. 1870-1→	. . . . .	1892	L
<i>Royal Society of Victoria.</i>			
Transactions. Vol. i→	. . . . .	1889	L
Proceedings. Vol. ii→	. . . . .	1881	L
PERTH.			
<i>Department of Agriculture, Western Australia.</i>			
Journal. 1899→	. . . . .	1900	Z
<i>Western Australia, Geological Survey.</i>			
Bulletin. No. 1→	. . . . .	1898	G
SYDNEY.			
<i>Australian Museum.</i>			
Records. Vol. i→	. . . . .	1890	G, L
Memoirs. Vol. ii→	. . . . .	1889	L
Report. 1885→	. . . . .	1886	G, L
<i>Geological Survey of New South Wales.</i>			
Memoirs. No. 1→	1888	G
Records. Vol. i→	1889	G
Mineral Resources. No. 1→	1898	G, M

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SYDNEY— <i>continued</i> .		
<i>Linnean Society of New South Wales.</i>		
Proceedings. Ser. II, vol. i→	1886	L
Abstract of Proceedings. 1886→	1886	L
<i>New South Wales: Department of Agriculture.</i>		
Agricultural Gazette of New South Wales. Vol. i→	1890	Z
Report. 1891→	1892	L
<i>New South Wales: Department of Mines.</i>		
Annual Reports. 1888→	1890	G, M
<i>New South Wales Naturalists' Club.</i>		
Memoirs. No. 1→	1903	L
<i>Royal Society of New South Wales.</i>		
Journal. Vol. xxiii→	1890	L
<i>University of Sydney.</i>		
Calendar. 1903→	1903	L
2. BRITISH GUIANA.		
DEMERARA.		
<i>Royal Agricultural and Commercial Society of British Guiana.</i>		
"Timehri." New Series. vol. i-xii, continued as Journal. 1900→	1887	Z
3. CANADA.		
HALIFAX, <i>Nova Scotia.</i>		
<i>Nova Scotian Institute of Natural Science.</i>		
Proceedings. Vol. v, pt. 3→	1881	L
MONTREAL.		
<i>Geological Survey of Canada.</i>		
Annual Report. Vol. iii→	1890	G
Contributions to Canadian Palæontology. Vol. i→	1889	G
OTTAWA.		
<i>Royal Society of Canada.</i>		
Proceedings. Vol. i→	1884	L
ST. JOHN.		
<i>Natural History Society of New Brunswick.</i>		
Bulletin. No. i→	1889	L
TORONTO.		
<i>Canadian Institute.</i>		
Transactions. Vol. iii→	1885	L
Annual Report. No. 1→	1888	L
<i>University of Toronto.</i>		
Studies. No. 1→	1903	L
4. CEYLON.		
COLOMBO.		
<i>Colombo Museum.</i>		
Spolia Zeylanica. Vol. i→	1903	L, Z
PÉRADENIYA.		
<i>Royal Botanic Gardens.</i>		
Annals. Vol. i→	1901	B
Circular and Agricultural Journal. No. 18→	1901	B

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5. INDIA.

ALLAHABAD.

Department of Land Records and Agriculture: North West Provinces and Oudh.

Bulletin. No. 1→ 1901 L

BOMBAY.

Bombay Natural History Society.

Journal. Vol. i, no. 3→ 1887 L

Marine Survey.

Administration Report. 1896-7→ 1897 L

CALCUTTA.

Asiatic Society of Bengal.

Journal. Pt. II, vol. xxxv→ 1884 L

Proceedings. 1886→ 1885 L

Botanical Survey of India.

Records. Vol. i→ 1894 B

Department of Revenue and Agriculture.

The Agricultural Ledger. Vol. i. 1894→ 1898 Z

Geological Survey of India.

Memoirs. Vol. xxiv→ 1891 G

Records. Vol. xxiv→ 1891 G

Palæontologica Indica. Series XIII, vol. iv→ 1891 G

General Reports. 1897→ 1898 G

Indian Museum.

Annual Report. 1884-5→ 1885 Z

Illustrations of the Zoology of the R.I.M.S.S. Investigator. Pt. i. 1892→ 1893 Z

Royal Botanic Gardens.

Annals. Vol. i→ 1888 B

Scientific Memoirs by Officers of the Medical and Sanitary Departments of the Government of India.

New Series. No. 1→ 1902 B, Z

Survey of India.

Notes. 1900→ 1900 L

Sheets of the Indian Atlas. Sh. i→ 1888 L

LUCKNOW.

Lucknow Provincial Museum.

Annual Report. 1901→ 1901 L

MADRAS.

Government Museum.

Report. 1884-5→ 1886 L

Bulletin. Vol. i→ 1894 Z

TRIVANDRUM.

Trivandrum Museum.

Report. 1899-1900→ 1901 L

6. NEW ZEALAND.

WELLINGTON, N.Z.

New Zealand Institute.

Transactions. Vol. xx→ 1890 L

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7. SOUTH AFRICA.

BULAWAYO.

Rhodesia Scientific Association.

Proceedings. Vol. iv→ 1903 L

CAPE TOWN.

Cape Colony: Department of Agriculture.

Annual Report of the Geological Commission. 1896→ 1902 G

Report of the Marine Biologist. 1896→ 1900 Z

South African Museum.

Annals. Vol. i→ 1898 L

Report. 1883→ 1884 L

South African Philosophical Society.

Transactions. Vol. vii→ 1893 L

GRAHAMSTOWN.

Albany Museum.

Report. 1882→ 1897 L

Records of the Museum. Vol. i→ 1903 L

JOHANNESBURG.

Geological Society of South Africa.

Transactions. Vol. iii→ 1898 G

PIETERMARITZBURG.

Geological Survey of Natal and Zululand.

Report. No. 1→ 1902 G

8. STRAITS SETTLEMENTS.

SINGAPORE.

Botanic Gardens Department.

Agricultural Bulletin of the Straits and Federated Malay States. Vol. i→ 1901 Z

Raffles Library and Museum.

Annual Report. 1879→ 1898 L

Straits Branch of the Royal Asiatic Society.

Journal. No. 1→ 1889 L

9. WEST INDIES.

BRIDGETOWN, Barbados.

Imperial Department of Agriculture for the West Indies.

West Indian Bulletin. Vol. i→ 1899 Z

Agricultural News. Vol. i→ 1902 Z

KINGSTON, Jamaica.

Botanical Department.

Bulletin. 1887→ 1887 B

Institute of Jamaica.

Journal. Vol. i→ 1891 L

Annual Report. 1879-80→ 1893 L

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when
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began. Initial of
Library
in which
the Serial
is kept.

C.—NON-BRITISH.

I. ARGENTINE REPUBLIC.

BUENOS AIRES.

Museo Nacional.

Anales. Tom. iii, entr. 2→.	. . . . .	1889	L, G
Comunicaciones. Tom. i→.	. . . . .	1898	L

CORDOVA.

Academia nacional de Ciencias.

Boletín. Tom. iv→.	. . . . .	1886	L
Actas. Tom. iii, pt. 2→.	. . . . .	1887	L

LA PLATA.

Museo.

Revista. Vol. i→.	. . . . .	1891	L
Anales. Sección Antropológica. No. i→.	. . . . .	1896	G, Z
——— Geológica y Mineralógica. No. i→.	. . . . .	1892	G
——— Paleontología Argentina. No. i→.	. . . . .	1891	G
——— Zoológica. No. i→.	. . . . .	1893	Z

2. AUSTRIA-HUNGARY.

BUDAPEST.

Magyar Ornithologiai Közpon.

Aquila. Vol. i→.	1894	Z
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CRACOW.

Akademija Umiejętności.

Rozprawy. Ser. II, tom. i→.	1894	L
Sprawozdanie. Tom. xxvii→.	1893	L
Bulletin International. 1889→.	. . . . .	1892	L
Catalogue of Polish Scientific Literature. Vol. i→.	1901	L

LINZ.

Museum Francisco-Carolinum.

Bericht. No. 3→.	1895	L
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PRAGUE.

České Akademie Císaré Františka Josefa.

Rozpravy . . . Trída II. Roč. i→.	1897	L
Věstník. Roč. viii→.	. . . . .	1900	L

TRENTSCHIN.

Trencsén Vármegyei Természettudományi Egylet.

Évkönyve. Évf. iv→.	1892	L
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VIENNA.

Kaiserliche Akademie der Wissenschaften. (Math.-nat. Classe.)

Anzeiger. Jahrg. xxv→.	1889	L
Sitzungsbericht. Bd. xevi→.	. . . . .	1888	L
Denkschriften. Bd. liv→.	. . . . .	1889	L
Berichte der Commission für Erforschung des Ostlichen Mittelmeeres. Reihe ii→.	1894	L
Mittheilungen der Erdbeben-Commission. Neue Folge. No. 1→.	1902	L

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VIENNA—continued.		
<i>Kaiserlich-königliche Geologische Reichsanstalt.</i>		
Abhandlungen. Bd. xvii→	1892	G
Jahrbuch. Bd. xli→	1891	G
Verhandlungen. 1891→	1891	G
<i>Kaiserlich-königliches Naturhistorisches Hofmuseum.</i>		
Annalen. Bd. i→	1886	L
3. BELGIUM.		
BRUSSELS.		
<i>Académie Royale des Sciences, &c.</i>		
Mémoires. Tom. xlvii→	1889	L
Mémoires couronnés. 4°. Tom. xlix→	1889	L
— — — — 8°. Tom. xli→	1889	L
Bulletin. Sér. III, tom. xiv, livr. 12→	1888	L
Annuaire. 1886→	1889	L
<i>Musée du Congo.</i>		
Annales, &c. Botanique. Sér. I→	1899	B
— Zoologie. Sér. I→	1898	Z
— Ethnographie et Anthropologie. Sér. I→	1899	Z
<i>Société Belge de Géologie de Paléontologie et d'Hydrologie.</i>		
Bulletin et Mémoires. Tom. xvi→	1902	G
<i>Société Entomologique de Belgique.</i>		
Annales. Vol. xxxii (1888)→	1890	Z
Mémoires. Tom. i→	1893	Z
<i>Université libre de Bruxelles.</i>		
Recueil de l'Institut Botanique. Tom. v→	1902	B
4. BRAZIL.		
BELEM.		
<i>Museu Goeldi.</i>		
Boletim. Vol. i→	1896	L
Memorias. Vol. i→	1901	L
SÃO JOÃO D'EL-REI.		
<i>Comissão Geographica e Geologica do Estado de Minas Geraes.</i>		
Boletim. No. 1→	1898	L
SÃO PAULO.		
<i>Comissão Geographica e Geologica de São Paulo.</i>		
Boletim. No. 1→	1891	L
<i>Museo Paulista.</i>		
Revista. Vol. i→	1896	L
5. CHILE.		
SANTIAGO.		
<i>Société scientifique du Chili.</i>		
Actes. Tom. ii→	1898	L
VALPARAISO.		
<i>Museo.</i>		
Revista Chilena. An. iii→	1899	L
Boletim. Ann. iii→	1899	L

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6. COSTA RICA.		
SAN JOSÉ.		
<i>Instituto Físico-Geográfico.</i>		
Boletín Vol. ii. (1902)→	1903	L
<i>Museo Nacional de Costa Rica.</i>		
Informe. 1894→	1895	L
7. DENMARK.		
COPENHAGEN.		
<i>Danmarks Geologiske Undersøgelse.</i>		
I. Raekke. Beskrivelse til geologisk Kort. No. 1→	1897	G
II. Raekke [Memoirs]. No. 1→.	1897	G
<i>Danske Biologiske Station.</i>		
Report. No. 3→ (1893→)	1903	L
<i>Kongeligt Dansk Videnskabernes Selskab.</i>		
Det. . . skrifter. Bd. iv, afd. 7→	1888	L
Oversigt over det. . . Forhandlinger. 1889→	1889	L
8. DUTCH EAST INDIES.		
BUI TENZORG.		
<i>Institut Botanique.</i>		
Bulletin [Botany]. No. 1→	1899	B
„ (No. xiii, &c.) Zoologie. No. 1→.	1902	Z
9. EGYPT.		
CAIRO.		
<i>Institut Égyptien.</i>		
Bulletin. Sér. II, tom. ix, no. 3→	1900	L
Mémoires. Tom. i→.	1898	L
10. FRANCE.		
BESANÇON.		
<i>Société d'Émulation du Doubs.</i>		
Mémoires. Series VII, tom iii→.	1900	L
CAEN.		
<i>Faculté des Sciences de Caen.</i>		
Bulletin du Laboratoire de Géologie. Année I→.	1895	G
GRENOBLE.		
<i>Université de Grenoble.</i>		
Travaux du Laboratoire de Géologie. Tome v→	1900	G
LA ROCHELLE.		
<i>Société des Sciences Naturelles de la Charente-Inférieure.</i>		
Annales. No. 16→	1889	L
MARSEILLES.		
<i>Faculté des Sciences.</i>		
Annales. Tom. iii→	1895	L
<i>Institut Colonial.</i>		
Annales. Vol. i→	1895	L
<i>Museum d'Histoire Naturelle.</i>		
Annales. Tom. iii→	1891	L

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PARIS.		
<i>Muséum d'Histoire Naturelle.</i>		
Nouvelles Archives. Sér. III, tom. x, no. 2→	1890	L
Bulletin. 1895→	1895	L
<i>Service de la Carte Géologique détaillée de la France.</i>		
[Maps.] Sh. 1→	1884	G
Bulletin. No. 35→	1894	G
<i>Société Entomologique de France.</i>		
Annales. Tom. lxxviii (1898)→	1900	Z
Bulletin. 1900→	1900	Z
<i>Société Géologique de France.</i>		
Bulletin. Sér. III, tom. xix→	1891	G
<i>Société Philomathique.</i>		
Bulletin. Sér. VII, tom. viii	1884	L
<i>Société Zoologique de France.</i>		
Causeries Scientifiques. No. 1→. 1901→.	1901	Z
<i>Union Coloniale Française.</i>		
Quinzaine Coloniale. No. 99→	1901	L
RENNES.		
<i>Société Scientifique et Médicale de l'Ouest.</i>		
Bulletin. Tom i→ [1892→]	1903	L
<i>Université de Rennes.</i>		
Travaux Scientifiques. Tom i→.	1903	L
ROUEN.		
<i>Museum d'Histoire Naturelle.</i>		
Actes. Tom. i→	1884	L
11. GERMANY.		
BERLIN.		
<i>Deutsche Geologische Gesellschaft.</i>		
Zeitschrift. Bd. xlv→	1892	G
<i>Königlich-Preussische Akademie der Wissenschaften.</i>		
Abhandlungen. 1887→	1889	L
Sitzungsberichte. 1894→	1895	L
<i>Königliche Friedrich-Wilhelms-Universität.</i>		
Notizblatt des K. Botanischen Gartens und Museums. Bd. i→	1895	B
DRESDEN.		
Bericht über die Verwaltung der königlichen Sammlungen für Kunst und Wissenschaft. 1872→	1886	L
FRANKFORT-ON-THE-MAINE.		
<i>Neue Zoologische Gesellschaft.</i>		
Der Zoologische Garten. Vol. xxxviii→	1897	Z
<i>Senckenburgische Naturforschende Gesellschaft.</i>		
Abhandlungen. Bd. xiv→	1887	L
Bericht. 1880-1→	1882?	L
GERA.		
<i>Gesellschaft von Freunden der Naturwissenschaften.</i>		
Jahresbericht. No. 4→	1887	L
HEIDELBERG.		
<i>Geologische Landesanstalt des Grossherzogthums Baden.</i>		
Mitteilungen. Bd. I→	1891	G
Geologische Spezialkarte & Erläuterungen. Blatt I→	1894	G

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HILDESHEIM.		
<i>Museumsverein.</i>		
Bericht. 1892→	1899	L
<i>Roemer Museum.</i>		
Mittheilungen. No. 1→	1897	L
LEIPZIG.		
<i>Zeitschrift für Physikalische Chemie.</i>		
Band ii→	1888	M
MAGDEBURG.		
<i>Naturwissenschaftlicher Verein.</i>		
Jahresbericht. 1885→	1886	L
STUTT GART.		
<i>Königliches Mineralien-Kabinet.</i>		
Mittheilungen. No. 1→	1896	M
<i>Oberrheinischer Geologischer Verein.</i>		
Bericht xxix→	1899	G
12. HOLLAND.		
HAARLEM.		
<i>Hollandsche Maatschappij der Wetenschappen.</i>		
Archives Néerlandaises des Sciences. Tom. xxii, livr 4→	1888	L
<i>Nederlandsche Maatschappij ter Bevordering van Nijverheid.</i>		
Bulletin van het Koloniaal Museum. 1893→	1895	L
Extra Bulletin van het Kolonial Museum. Afl. 1→	1894	L
HAGUE, THE.		
<i>Nederlandsche Entomologische Vereeniging.</i>		
Tijdschrift voor Entomologie. 1857→	1881	Z
Entomologische Berichten. No. 1→	1901	Z
NIMEGUEN.		
<i>Nederlandsche Botanische Vereeniging.</i>		
Nederlandsch Kruidkundig Archief. 1900. Deel ii→	1900	B
13. ITALY.		
ACIREALE.		
<i>Accademia di Scienze, &c.</i>		
Atti. Vol. i→	1895	L
BOLOGNA.		
<i>Reale Accademia delle Scienze dell' Istituto.</i>		
Memorie. Ser. IV, tom. ix→	1889	L
Rendiconto. 1887-8→	1889	L
GENOA.		
<i>Museo Civico di Storia Naturale.</i>		
Annali. Vol. i→ 1870→	1890	Z
<i>Regia Università degli Studi.—Musei de Zoologia e Anatomia Comparata.</i>		
Bollettino. Vol. i→	1897	Z

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MILAN.			
<i>Museo Civico di Storia Naturale,</i> Publishes in conjunction with the <i>Società Italiana di Scienze Naturali.</i>			
	Atti. Tom. i→	1893	L
	Memorie. Tom. i→	1893	L
NAPLES.			
<i>Reale Accademia delle Scienze Fisiche e Matematiche.</i>			
	Atti. Nova Serie, tom. i→	1888	L
	Rendiconto. Ser. II, tom. iii→	1889	L
PISA.			
<i>Società Toscana di Scienze Naturali.</i>			
	Atti (Memorie). Vol. ix→	1891	L
	Atti (Processi Verbali). Vol. vii→	1894	L
ROME.			
<i>Real Comitato Geologico d'Italia.</i>			
	Bollettino. Vol. xxii→	1892	G
	Memorie. Vol. vi→	1891	G
TURIN.			
<i>Reale Accademia delle Scienze.</i>			
	Memorie. Tom. xli→	1891	L
	Atti. Vol. xxvi→	1891	L
	Atti. Classe di Scienze fisich e matematiche. Vol. xvii. (1881)→	1904	L
14. JAPAN.			
TOKIO.			
<i>Geological Society.</i>			
	Geological Magazine. Vol. i→	1902	G
<i>Imperial University of Japan.</i>			
	Journal of the College of Science. Vol. vi, no. 4→	1894	L
<i>Zoological Society.</i>			
	Annotationes Zoologicae Japonenses. Vol. i.→	1897	Z
15. MEXICO.			
MEXICO.			
<i>Istituto Geológico de México.</i>			
	Boletín. No. 3→	1896	G
<i>Sociedad Científica "Antonio Alzate."</i>			
	Memorias y Revista. Tom. ix→	1896	L
16. NORWAY.			
BERGEN.			
<i>Bergens Museum.</i>			
	Aarsberetning. 1883→	1887	L
CHRISTIANIA.			
<i>Norges Geologiske Undersøgelse.</i>			
	[Memoirs.] No.→ 1	1891	G
DRONTHEIM.			
<i>Kongeligt Norske Videnskabers-Selskab.</i>			
	Det . . . Skrifter. 1898→	1899	L
STAVANGER.			
<i>Stavanger Museum.</i>			
	Aarsberetning. 1890→	1891	L

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TROMSØ.			
<i>Tromsø Museum.</i>			
	Aarshefter. No. 10→	1895	L
	Aarsberetning. 1873→	1895	L
17. PORTUGAL.			
COIMBRA.			
<i>Universidade.</i>			
	Annuario. 1896-7→	1897	L
	Arquivo Bibliographico. Vol. i→	1901	L
LISBON.			
<i>Academia Real das Sciencias.</i>			
	Jornal. Ser. II, tom. vi→	1900	L
<i>Commissão dos Serviços Geologicos de Portugal.</i>			
	[Memoirs]	1889	G
	Comunicações. Tom. ii→	1893	G
OPORTO.			
	<i>Annaes de Sciencias Naturaes.</i> Ann. iii	1896	L
18. ROUMANIA.			
BUKAREST.			
<i>Societatea de Sciințe.</i>			
	Buletinul. Annl i→	1897	L
JASSY.			
<i>Société des Médecins et des Naturalistes.</i>			
	Bulletin. Vol. vi, No. 4→	1892	L
19. RUSSIA.			
EKATERINBURG.			
<i>Ural'skoe Obshchestvo Lyubitelei Estestvoznaniya.</i>			
	Zapiski. Tom. xiii, Part 2→	1895	L
HELSINGFORS.			
<i>Finlands Geologiska Undersökning.</i>			
	Kartbladet. No. 1→	1899	G
	Beskrifning till Kartbladet. No. 1→	1899	G
	Bulletin. No. 6→	1899	G
MOSCOW.			
<i>Société impériale des Naturalistes du Moscou.</i>			
	Nouveaux Mémoires. Tom. xv→	1888	L
	Bulletin. 1887→	1888	L
ST. PETERSBURG.			
<i>Académie impériale des Sciences.</i>			
	Mémoires. Sér. VII, tom. xxxv, No. 10→	1891	L
	Bulletin. Nov. Sér., tom. xxxii, No. 1→	1891	L
	Annuaire du Musée Zoologique. 1896→ (2 copies).	1896	L, Z
<i>Cabinet de Sa Majeste.</i>			
	Travaux de la Section Géologique. Vol. i→	1896	G
<i>Comité Géologique.</i>			
	Mémoires. Tom. ii→	1885	G
	Bulletin. Tom. i→	1885	G
<i>Kaiserliche Mineralogische Gesellschaft.</i>			
	Verhandlungen. Bd. xxviii→	1892	M
	Materialien zur Geologie Russlands. Bd. i→	1892	G

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ST. PETERSBURG—continued.		
<i>Russkoe Entomologhicheskoe Obshchestvo.</i>		
Horæ, &c. Tom. xxxv→	1902	Z
<i>S.-Peterburghskii Biologhicheskii Laboratoriya</i> (<i>Laboratoire Biologique</i>).		
Bulletin. Tom. i→	1896	L
TIFLIS.		
<i>Kaukasisches Museum.</i>		
Bericht. 1892→	1893	L
Izvestiya. Tom. i→	1900	L
Sammlungen. Bd. i→	1900	L
WARSAW.		
<i>Imperatorskii Varshavskii Unïversitet.</i>		
Kollektzii Zoologhicheskagho Kabineta...Unïversiteta. No. 1→	1896	Z
Rabotui iz Laboratorii Zoologhicheskagho Kabineta Obshchestvo Estestvoispuitatelei (<i>Société des Naturalistes</i>).	1896	Z
Trudui (Travaux). Tom. i→	1892	L
20. SALVADOR.		
SAN SALVADOR.		
<i>Museo Nacional.</i>		
Annales. Tom. i→	1903	L
21. SERVIA.		
BELGRADE.		
<i>Institut Géologique.</i>		
Annales Géologique de la Péninsule Balkanique. Tom. i→	1890	Z
<i>Srpska Kral'evska Akademïa.</i>		
Ghlas. No. 1→	1899	L
Ghodlishn'ak. No. 13→	1901	L
22. SPAIN.		
BARCELONA.		
<i>Real Academia de Ciencias.</i>		
Memorias. Ser. III, Vol. i→	1894	L
Boletín. Ser. III, Vol. i→	1894	L
23. SWEDEN.		
STOCKHOLM.		
<i>Kongliga Svenska Vetenskaps-Akademien.</i>		
Handlingar. Ny Följd, Bd. xxi, no. 9→	1888	L
Bihang till...Handlingar. Bd. xiii-xxviii.		
[Continued as:]		
Arkiv för Botanik. Bd. i→	1888	L
— Kemi, Mineralogi och Geologi. Bd. i→		
— Zoologi. Bd. i→		
Årsbok för år. 1903→		
Öfversigt af...Förhandlingar. 1888→	1888	L

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UPSALA.		
<i>Kongliga Universitetet i Upsala.</i>		
Årsskrift. 1885→	1896	L
Bulletin of the Geological Institution. Vol. i→	1893	G
Meddelanden från...Mineralogisk-Geologiska Institution. No. 1→	1896	M
<i>Kongliga Vetenskaps-Societeten.</i>		
Nova Acta. Tom. xiv, Part 2→	1891	L
24. SWITZERLAND.		
GENEVA.		
<i>Société de Géographie.</i>		
Le Globe. Ser. V, tom. xi→	1900	L
SION.		
<i>Société Murithienne du Valais.</i>		
Bulletin. Fasc. xiii→	1892	L
25. UNITED STATES.		
<i>American Microscopical Society.</i>		
Transactions. Vol. xxiii→	1902	L
ALBANY.		
<i>Geological Survey of the State of New York.</i>		
Annual Report. No. 8→	1896	G
<i>New York State Museum of Natural History.</i>		
Bulletin. Vol. i→	1889	L
Annual Report. No. 42→	1891	L
AUSTIN.		
<i>Geological Survey of Texas.</i>		
Annual Reports. No. 1→	1890	G
BALTIMORE.		
<i>Maryland Geological Survey.</i>		
[Reports]. Vol. i→	1898	G
BERKELEY.		
<i>University of California.</i>		
Annual Report. 1900→	1902	L
Bulletin of the Department of Geology. Vol. i→	1894	G
Publications: Botany. Vol. i→	1903	L
— Pathology. Vol. i→	1904	L
— Physiology. Vol. i→	1903	L
— Zoology. Vol. i→	1903	L
BOSTON.		
<i>American Academy of Arts and Sciences.</i>		
Proceedings. Vol. xxiii→	1888	L
<i>Boston Society of Natural History.</i>		
Memoirs. Vol. iv, no. 1→	1891	L
Proceedings. Vol. xxiv→	1890	L
Occasional Papers. Vol. iv→	1894	L
BROOKLYN.		
<i>Brooklyn Institute of Arts and Sciences.</i>		
Museum Science Bulletin. Vol. i→	1901	L
Children's Museum Bulletin. No. i→	1902	L
Children's Museum Notes. No. i→	1904	L
Coldspring Harbor Monographs. No. i→	1903	L

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BUFFALO.			
	<i>Buffalo Society of Natural Science.</i>		
	Bulletin. Vol. v, pt. 3→	1898	L
CAMBRIDGE, Mass.			
	<i>Harvard University.</i>		
	Bussey Institution. Bulletin. Vol. i, pt. 2→	1888	L
	Gray Herbarium. Contributions. No. 16→	1899	B
	Museum of Comparative Zoology. Bulletin.		
	Vol. i (1863)→	1883	Z
	— Memoirs. Vol. xiv→	1889	Z
CHAPEL HILL.			
	<i>Elisha Mitchell Scientific Society.</i>		
	Journal. 1883→	1903	L
CHICAGO.			
	<i>Academy of Natural Sciences.</i>		
	Bulletin. Vol. ii, no. 3→	1902	L
	Bulletin of the Natural History Survey. No. 1→	1902	L
	Special Publication. No. 1→	1902	L
	<i>Field Columbian Museum.</i>		
	Publications. No. 1→	1896	B, L
	<i>University of Chicago.</i>		
	University Record. Vol. i→	1896	L
	Botanical Gazette. Vol. xxx→	1900	B
CINCINNATI.			
	<i>Cincinnati Society of Natural History.</i>		
	Journal. Vol. iv→ [Vol. xx→ two copies]	1889	L
	<i>Lloyd Library of Botany.</i>		
	Bulletin. No. 1→	1900	B
COLUMBUS.			
	<i>Ohio State Academy of Science.</i>		
	Annual Report. No. 9→	1901	L
	Special Papers. No. 1→	1900	L
DENVER.			
	<i>Colorado Scientific Society.</i>		
	Proceedings. Vol. i→	1885	L
DES MOINES.			
	<i>Iowa Geological Survey.</i>		
	[Annual Reports.] No. 1→	1894	G
IOWA CITY.			
	<i>State University of Iowa.</i>		
	Bulletin from the Laboratories of Natural History.		
	Vol. i, pt. 2→	1890	L
JEFFERSON CITY.			
	<i>Geological Survey of Missouri.</i>		
	Reports. Vol. i→	1893	G
LAS CRUCES.			
	<i>New Mexico College of Agriculture.</i>		
	Bulletin. No. 1→	1893	Z
LAWRENCE.			
	<i>University of Kansas.</i>		
	Kansas University Quarterly. Vol. vii, pt. 2→	1898	L
	The University Geological Survey. Vol. iv→	1898	G

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LITTLE ROCK.		
<i>Geological Survey of Arkansas.</i>		
Annual Reports. 1888→	1894	G
LOS ANGELES.		
<i>Southern California Academy of Science.</i>		
Bulletin. Vol. i→	1902	L
MADISON.		
<i>Wisconsin Academy.</i>		
Transactions. Vol. i→	1884	L
<i>Wisconsin Geological and Natural History Survey.</i>		
Bulletin. No. 1→	1899	L
MEDFORD.		
<i>Tuft's College.</i>		
Studies of Tuft's College. No. 1→	1894	Z
MILWAUKEE.		
<i>Public Museum.</i>		
Annual Report. No. 1→	1891	L
MINNEAPOLIS.		
<i>Geological Survey of Minnesota.</i>		
Botanical Studies. 1894→	1894	B
MISSOULA.		
<i>University of Montana.</i>		
Bulletin. Biological Series. No. 1→	1902	L
MONTGOMERY.		
<i>Geological Survey of Alabama.</i>		
Reports→	1894	G
Bulletin. No. 1→	1894	G
NEW YORK.		
<i>American Geographical Society.</i>		
Bulletin. Vol. xxxi→	1899	L
<i>American Institute of Mining Engineers.</i>		
Bulletin. Vol. i→	1899	M
Transactions. Vol. i→	1899	M
<i>American Museum of Natural History.</i>		
Memoirs. Vol. i→	1895	L
Bulletin. Vol. ii, no. 2→	1889	L
Annual Report. 1870→	1889	L
American Museum Journal. Vol. i→	1902	L
<i>Columbia College.</i>		
The School of Mines Quarterly. Vol. x→	1889	M
<i>Journal of Geography.</i> Vol. i, no. 4→	1902	L
<i>New York Academy of Sciences.</i>		
Annals. Vol. iv, pt. 3→	1888	L
Memoirs. Vol. ii→	1900	L
<i>Zoological Society.</i>		
Annual Reports. No. 1→	1897	Z
News Bulletin. No. 1→	1897	Z
PHILADELPHIA.		
<i>Academy of Natural Sciences Philadelphia.</i>		
Proceedings. 1888→	1888	L
— [in sheets as issued]. 1891→	1891	L
Journal. Vol. ix, pt. 2	1892	L

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PHILADELPHIA—continued.			
<i>American Philosophical Society.</i>			
Transactions.	Vol. xix→	1898	L
Proceedings.	Vol. xxxi→	1893	L
<i>Geographical Society.</i>			
Bulletin.	Vol. i, no. 2→	1894	L
<i>University of Pennsylvania.</i>			
Contributions from the Botanical Laboratory.			
	Vol. i→	1892	B
PITTSBURGH.			
<i>Carnegie Museum.</i>			
Publications.	No. 1→	1899	L
Annals.	Vol. i→	1902	L
Memoirs.	Vol. i→	1902	L
PORTLAND.			
<i>Portland Society of Natural History.</i>			
Proceedings.	Vol. ii, no. 2→	1895	L
PRINCETON.			
<i>Princeton University Bird Club.</i>			
Bulletin.	Vol. i→	1901	Z
ROCHESTER.			
<i>Geological Society of America.</i>			
Bulletin.	Vol. i→	1892	G
SACRAMENTO.			
<i>California State Mining Bureau.</i>			
Annual Reports.	x→	1891	G
ST. LOUIS.			
<i>Missouri Botanical Garden.</i>			
Annual Report.	Vol. i→	1891	B
SAN FRANCISCO.			
<i>California Academy of Sciences.</i>			
Proceedings.	Vol. iv, pt. 2→	1887	L
Occasional Papers.	Vol. i→	1891	L
SPRINGFIELD.			
<i>Geological Survey of Illinois.</i>			
Geology and Palæontology.	Vol. viii→	1891	G
<i>Illinois State Museum.</i>			
Bulletin.	No. 3→	1894	G
TRENTON.			
<i>Geological Survey of New Jersey.</i>			
Annual Reports.	1890→	1891	G
Final Reports.	Vol. iii→	1899	G
URBANA.			
<i>Illinois State Laboratory of Natural History.</i>			
Bulletin.	Vol. iii, no. 15→	1899	L
WASHINGTON.			
<i>Biological Society.</i>			
Proceedings.	Vol. i→	1888	L
<i>National Academy of Sciences.</i>			
Memoirs.	Vol. i→	1890	L
<i>National Geographic Society.</i>			
National Geographic Magazine.	Vol. viii→	1899	L
<i>Philosophical Society.</i>			
Bulletin.	Vol. i→	1886	L

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WASHINGTON—continued.		
<i>Smithsonian Institution.</i>		
Smithsonian Contributions to Knowledge. Vol. xviii→	1886	L
Smithsonian Miscellaneous Collections. Vol. xi→	1886	L
Annual Report. 1882→	1884	L
Annual Reports: Bureau of Ethnology. Vol. i→	1886	L
<i>United States Coast Survey.</i>		
Reports. 1866→	1888	L
<i>United States Department of Agriculture.</i>		
Year Book. 1867→	1899	Z
Farmers' Bulletin. No. 7→	1899	Z
<i>(Agrostology Division.)</i>		
Bulletin. No. 1→	1899	L
Circular. No. 1→	1899	L
<i>(Animal Industry Division.)</i>		
Bulletin. No. 7→	1899	Z
Circular. No. 1→	1899	Z
Report. No. 3→	1899	Z
<i>(Biological Survey Division.)</i>		
Bulletin. No. 1→	1898	L
North American Fauna. No. 14→	1899	L
<i>(Botany Division.)</i>		
Bulletin. No. 16→	1899	L
Circular. No. 1→	1899	L
Contributions from the U. S. National Herbarium.		
Vol. i→	1894	B
<i>(Entomology Division.)</i>		
Bulletin. No. 6→	1899	Z
——— Technical Series. No. 1→	1896	Z
Circular. Ser. II, no. 2→	1899	Z
<i>(Fiber Investigations.)</i>		
Report. No. 1→	1899	L
<i>(Plant Industry Bureau.)</i>		
Bulletin. No. 1→	1899	L
<i>(Vegetable, Physiology and Pathology Division.)</i>		
Bulletin. No. 1→	1899	L
Circular. No. 6 →	1899	L
<i>United States Geological Survey.</i>		
Annual Reports. No. 8→	1890	G
Monographs. Vol. v→	1885	G
Bulletin. Vol. i→	1885	G
Professional Paper. No. 1	1903	G
Water Supply and Irrigation Papers. No. 65→	1903	G
<i>United States National Museum.</i>		
Bulletin. No. 1→	1886	L
Special Bulletin. No. 1→	1897	L
Proceedings. Vol. 1→	1886	L
<i>Washington Academy of Sciences.</i>		
Proceedings. Vol. i→	1899	L
26. URUGUAY.		
MONTEVIDEO.		
<i>Museo Nacional.</i>		
Anales. Vol. i→	1896	L

THE DEPARTMENT OF BOTANY.

THE DEPARTMENT OF BOTANY.

I. GENERAL SKETCH.

The Department of Botany, originally styled the Banksian Department, was established for the reception of the herbarium of Sir Joseph Banks, who had, shortly before his death in 1820, bequeathed it to Robert Brown, at whose demise it was to become the property of the British Museum: with Brown's consent, the herbarium might be removed to the Museum during his lifetime. In the first Report of the Banksian Department, dated 7th December, 1827, Brown says that he has superintended its removal, and was then engaged arranging it. The following memorandum as to the contents of the herbarium was submitted to the Trustees in 1834:—

“The Banksian general herbarium, contained in cabinets consisting of sixty-seven cubes having eight drawers each, is arranged according to the Linnaean system, and by means of alphabetical and systematic indexes it may be consulted without difficulty. The number of species in this arranged herbarium is 23,400, of which 20,856 are phanerogamous and 2,544 cryptogamous plants; the specimens of many, however, being more or less incomplete. Connected with the general herbarium there is a collection of fruits and seeds, systematically arranged and contained in 64 drawers. There is also a collection of flowers and fruits, chiefly of the more rare or of succulent plants, preserved in spirits, and contained in 326 bottles. One of the presses contains 67 large specimens, chiefly parts of fructification, fronds, and sections of trunks of palms. A cabinet of four cubes contains several partial [special] collections, which, being the authentic materials of important botanical works, are kept separate, particularly Clifford's herbarium, the principal authority for the plants described in one of Linnaeus's earliest and most celebrated works; Clayton's herbarium, from which Gronovius's 'Flora Virginica' was entirely formed; a considerable number of plants collected in the Levant by Tournefort and described in the 'Corollarium' to his 'Institutiones Rei Herbariae'; and others

sent from Cochin-China by Loureiro, and published in the flora of that country. [There are] also, in five large folio volumes, the herbarium and drawings of Hermannus, chiefly of Zeylan plants, of which the 'Flora Zeylanica' of Linnaeus is a systematic enumeration and description. The unarranged collections and duplicates consist of 1,700 parcels. The unarranged collections and duplicates are disposed geographically, and are in progress of incorporation with the arranged herbarium, either as furnishing distinct species, or as completing the specimens of those already contained in a less perfect state. The additional species in these collections probably amount to nearly 5,000 phanerogamous plants."

In the following year certain other collections, until then in the charge of the principal librarian, were transferred to the Banksian Department. These, according to the following account submitted by Brown, comprised:—

"1. Sir Hans Sloane's herbarium, formed by himself and other botanists, whose collections are kept distinct from each other in about 333 volumes, all of them in a tolerably good state of preservation; they are all numbered on the backs, and may be referred to without difficulty. 2. Baron de Moll's herbarium, purchased by the Trustees, together with his library in 1816. 3. A collection of Chelsea Garden Plants. Sir Hans Sloane in 1721 gave the freehold of the ground to the Company of Apothecaries on condition that 50 new plants should annually be delivered to the Royal Society till the total amounted to 2,000 distinct species. The list of the 50 first [appeared] in the Philosophical Transactions for 1722, and that which completed the required number, 2,000, in 1761. It appears, however, that the Company remained tributary in 50 distinct species per annum till the year 1796, at which time the number of 3,750 was completed in 75 large fasciculi, which are now extant in perfect preservation. Besides these herbaria there is also a collection of fruits and seeds in spirits of wine, and another of dried specimens of fruits and seeds, roots, wood, and other parts of vegetables."

Of Sir Hans Sloane's important collection, some account follows. The Chelsea Garden plants are now incorporated with the general herbarium. The Baron de Moll's collection, according to the report of König and Baber, who went to examine his minerals before their purchase by the Trustees, contained specimens from Pallas and other eminent botanists, as well as plants collected by himself in the Alps; this was probably

incorporated with the general herbarium, but no specimens can now be identified as coming therefrom.

THE SLOANE HERBARIUM.

This extensive herbarium, containing as it does the results of some of the earliest botanical investigations of China, India, and the New World, is of the greatest historical value. The plants are catalogued in two copies of Ray's "*Historia Plantarum*" preserved in the Department, so that they can be easily consulted.

The plants collected by Sloane himself in Jamaica occupy eight volumes, in which are included the drawings from which the plates in the "*Natural History of Jamaica*" were made; Sloane's own copy of this work, with his MS. notes, accompanies the collection. Among the principal contents of the herbarium may be mentioned: the plants collected by James Cunningham in China, in 1698–1703; those from the Philippines, by Kamel, sent to Petiver in 1701, and described in the Appendix to Ray's "*Historia Plantarum*," vol. iii; the collections of Petiver and Plukenet, containing a large number of the plants figured and described in their works; American plants from Banister, Bartram, Catesby, Houstoun, Krieg and Vernon; the collections of Hermann and Oldenland, from the Cape of Good Hope; Kaempfer's plants from Japan (1691); plants from Jussieu, Tournefort and Vaillant; and those of most of the contemporary English botanists—Buddle (an important British Herbarium), Doody, Philip Miller, Merrett, Ray, Sherard, Uvedale; and from the gardens of Badminton, Oxford and Westminster.

THE BANKSIAN HERBARIUM.

The herbarium of Sir Joseph Banks (1743–1820) is the foundation of the General Herbarium. At the time of its acquisition it was one of the most important in existence—not only on account of its extent, but as containing a large number of types of published species—and, owing to the freedom of access which was allowed to it, one of the most frequently cited in botanical works. Besides the invaluable collections made in Malaya, Brazil, South Africa, Polynesia, Australia and New Zealand, by Banks and Solander, in their voyage round the world with Cook in 1768–71, it contains the plants collected

by Banks in Great Britain at various dates and in Newfoundland and Labrador in 1766, as well as those obtained in Iceland in 1772. The herbarium was continually being enriched by purchase and exchange. Besides Hermann's herbarium, and the herbarium of Clifford upon which the "*Hortus Cliffortianus*" is based, a certain number of Linnaeus's types were obtained from Smith in 1786, when the Banksian herbarium was compared with that of Linnaeus. The collections of William Houston from Central America and the West Indies were purchased by Banks from Philip Miller, whose own herbarium, containing the types of many of the plants described in the "*Gardeners Dictionary*," ed. viii (1768), was acquired by Banks in 1774. In that year Banks arranged with the "*Societas Unitatis Fratrum*," or Moravian Brothers, to collect plants at Tranquebar, whence he received about 500 specimens in 1775-78. In 1775 he purchased a large herbarium of Swiss plants, indicated in the herbarium as "*Herb. Helvet.*," collected by Dick; these Banks obtained through Dr. Pitcairn (1711-91), who had a botanic garden at Islington, specimens from which are in the herbarium. The collections of the Forsters and of Loureiro were acquired at about the same time. The plants collected by Alexander Russell (1715?-68) and his brother Patrick (1726-1805), who were at Aleppo in 1740-53 and 1755-71 respectively, were sent to Banks, and are described by him and Solander in the "*Natural History of Aleppo*," ed. 2 (1789). Other well-known London gardens contributed to the Banksian collection at this period: notably those of James Gordon at Mile End, James Lee at Hammersmith, William Malcolm at Kensington, and James Vere at Kensington Gore; there are also a few specimens from the garden of Richard Anthony Salisbury at Chapel Allerton, Yorkshire. The most important collection of cultivated plants is, however, that from the Royal Gardens, Kew, which contains the types of the numerous species described by Banks's librarians Solander and Dryander (helped in the second edition by Brown) in Aiton's "*Hortus Kewensis*"; the MS. original descriptions of these and of a large number of other plants in the Sloane and Banksian herbaria are preserved in the Department of Botany. Jacquin's herbarium, consisting largely of plants cultivated by him in the Vienna and Schönbrunn Gardens and containing some of his West Indian plants, was purchased by Banks and is incorporated with his collection, which also contains specimens sent by A. L. de Jussieu from the Paris Garden.

Among the more noteworthy of the Indian collectors are William Roxburgh; Buchanan-Hamilton (who sent plants to Banks in 1794 and 1798); J. G. Koenig, who sent plants in 1776 and bequeathed to Banks his herbarium and MSS.; James Robertson, who collected in Bombay, Madras, China and Johanna Island in 1772-76. The most important Chinese collection is that made by Sir George Staunton during Lord Macartney's embassy to China in 1793.

From Polynesia are the large collections of J. R. and G. Forster, made during Cook's second voyage (1772-75); also plants obtained during Cook's third voyage (1776-80) by David Nelson, who also collected in Australia and Timor; William Anderson also collected during these voyages in the same countries. The specimens collected by Christopher Smith and James Wiles during Bligh's voyage to Otaheite (1791-93) were also sent to Banks.

From the Cape there are, besides the very important collections of Francis Masson (1741-1805), who also sent plants to Banks from the Canaries and Azores, from the West Indies, and from North America and Canada; about 1,000 specimens from Oldenburg, collected in 1772; and others from James Niven (1774?-1826), David Nelson (*d.* 1789), and Andreas Auge (*fl.* 1794). Among the collectors in tropical Africa may be mentioned William Brass (*fl.* 1790), who collected at Cape Coast; Henry Smeathman (*fl.* 1750-87), who sent plants from Madagascar and Sierra Leone; and Christian Smith (1785-1816), whose important collections during the Congo expedition were described by Robert Brown. The principal contributor of Madagascar plants was John Vaughan Thompson (*fl.* 1807-29).

Among New World collections, the most important is that of John Clayton (1686?-1773), who sent his Virginian plants to Gronovius; they are the types of Gronovius's "Flora Virginica" (1743-1762). The volume of South Carolina plants collected by William Young (*fl.* 1753-84), with an accompanying volume of crude drawings, was acquired by Banks from the Bute library in 1794. Other early American collectors represented in the herbarium are John Bartram (1699-1777), and his son William (1739-1823); W. V. Turner, who collected in the "Cherokee country" in 1769; Peter Kalm (1717-79); William Clifton (*fl.* 1765); Dr. John Mitchell (*d.* 1772); and Archibald Menzies (1754-1842).

Among West Indian collectors may be mentioned Olof Swartz

(1760–1818), who contributed largely to the herbarium and worked at the material therein preserved, obtained by previous collectors; the results of his researches are included in his “Prodrômus” (1783), where he pays a high tribute to Banks—“Non poterunt immortales perillustris hujus viri digne satis celebrari laudes”; Henri de Ponthieu sent plants from the Caribee Islands in 1778; William Wright (1735–1819) and Roger Shakespear from Jamaica, the latter collected in 1777–82; Alexander Anderson (*d.* 1815), plants from Demerara in 1791 and later from the St. Vincent Garden, of which he was curator; John Greg, plants from Dominica, collected 1777.

ROBERT BROWN'S HERBARIUM.

At the death of Robert Brown in 1858, his herbarium came into the possession of John Joseph Bennett, then Keeper of the Department of Botany. It mainly consisted of the very valuable and interesting collection made by Brown in his capacity as naturalist during the voyage of H.M.S. *Investigator*, commanded by Captain Flinders, on the coast of New Holland and Van Diemen's Land in 1802–5, and included nearly 3,900 species, among them being the types of Brown's “Prodrômus Floræ Novæ Hollandiæ.” The herbarium during Bennett's lifetime was kept at the Museum, and was accessible to botanists; it was largely employed by Bentham in the preparation of his “Flora Australiensis.” On Bennett's death in 1876, the Museum became possessed of a complete and very fine series of the Australian plants, with all Brown's notes, and of the remainder of his herbarium; this contained Australian plants from Baxter, Sturt, Mitchell and Labillardière, Brown's own collections in Timor and at the Cape, and various specimens from other collectors, including types of species described by Brown.

Mr. Murray desires to state that advantage has been taken of Mr. Britten's unique knowledge of the history of the botanical collections. He, with Mr. Gepp's help, has completed the work.

2.—CHRONOLOGICAL ACCOUNT OF THE PRINCIPAL ACCESSIONS
TO THE BOTANICAL COLLECTIONS TO THE END OF 1902.

1829.

An extensive collection of Indian plants, made by Dr. Wallich, and presented by the East India Company; further instalments were received in 1847 and 1849.

1831.

T. Drummond's "Musci Americani," collected in North America during the second Land Expedition (1825-28) of Sir John Franklin: presented by Dr. Richardson; another series—from the Southern States—was purchased in 1842.

1834.

400 Egyptian plants collected and presented by John G. Wilkinson, Esq.

Plants of Georgia and Carolina collected by Beyrich: purchased.

500 Chilian plants collected by Bertero: purchased.

A small collection of Peruvian plants, made by A. Mathews: purchased: in 1840, 207 plants were purchased.

1836.

127 plants from British Guiana collected and presented by R. H. Schomburgk, Esq.; in 1837, 400 plants were presented; in 1838, 300; in 1839, 323; in 1843, 510; in 1844, 530 plants, with 125 specimens of woods and fruits.

170 Arctic plants collected and presented by Sir George Back, R.N.

119 plants from Labrador collected and presented by Lieut. Bowen, R.N.

250 woods and 135 plants from Brazil, collected by Blanchet: purchased; in 1838, 180 plants were purchased.

1837.

172 plants collected during the Euphrates Expedition and presented by Col. Chesney.

1838.

1,300 Mexican plants collected by Berlandier : purchased.

1839.

405 South American plants collected by George Barclay during the voyage of H.M.S. *Sulphur* : presented by W. T. Aiton, Esq.

503 Mexican plants collected by Hartweg : purchased ; in 1841, 108 Guatemalan plants were purchased ; in 1842, 66 plants from Guayaquil ; in 1843, 609 Columbian and 138 Peruvian plants.

1840.

805 specimens of woods, purchased of B. Couch, Plymouth Dockyard.

513 plants from Port Natal collected by Dr. Krauss : purchased.

258 Nubian plants collected by Theodor Kotschy : purchased.

1841.

75 South Australian plants collected and presented by Mrs. Captain Grey ; in 1845, 265 plants were presented.

2,433 plants collected in the Philippines, etc. by Hugh Cuming : purchased ; in 1843, 113 orchids in spirit were purchased.

1,907 plants from Syria, Persia, and Arabia, collected by Aucher-Eloy : purchased.

803 plants and 160 woods from Brazil collected by Claussen : purchased ; in 1843, 100 woods were purchased.

791 Brazilian plants collected by George Gardner : purchased ; in 1842, 358 plants were purchased ; in 1843, 140 cryptogams.

313 Abyssinian plants collected by Schimper : purchased.

126 Chilian plants collected by Bridges : purchased ; in 1842, 108 plants were purchased ; in 1843, 313.

134 Brazilian plants collected by Martius : purchased.

1842.

170 Australian plants presented by Capt. Wickham, R.N.

358 Surinam plants collected by Hostmann: purchased; in 1843, 541 plants were purchased.

The following were purchased at the sale of Lambert's Herbarium; 1,998 plants and 397 woods, barks, fruits, and seeds, from Peru, Mexico, and Spain, collected by Ruiz and Pavon; 2,250 Russian and Siberian plants collected by Pallas; 453 plants collected during Cook's second voyage, and forming the younger Forster's Herbarium; 674 Indian plants collected by Buchanan Hamilton; 400 plants from French Guiana collected by Martin.

1843.

446 North American plants collected and presented by E. Doubleday, Esq.; in the following year, 251 plants were presented.

380 South African plants collected by Burke: presented by the Earl of Derby.

90 plants from the east coast of China collected and presented by Sir Everard Home; the following year, 51 plants were presented.

1000 West Australian plants collected by J. Drummond: purchased; in 1844, 400 plants were purchased; in 1845, 345; in 1848, 400; in 1850, 552; in 1854, 450.

228 plants of Columbia and New Granada collected by Linden: purchased; in 1844, 64 plants were purchased; in 1845, 232; in 1868, 919.

1844.

595 South African plants collected and presented by Dr. Wallich.

260 plants from Tenasserim collected and presented by Dr. J. D. V. Packman.

150 plants from the Canary Islands collected and presented by P. B. Webb, Esq.; in the following year, 148 plants were presented.

814 Persian plants collected by Theodor Kotschy: purchased; in 1857, 504 plants from Asia Minor were purchased; in 1862, 580 plants from Cilicia and Kurdistan; in 1864, 232 plants from Syria and Cyprus; in 1867, 1,875 Persian.

- 500 European mosses prepared by W. P. Schimper : purchased.
 175 plants from Chili collected by Renous : purchased.
 168 models of British Fungi made by J. Sowerby : purchased.

1845.

1,120 South American plants collected during the Voyage of Survey, in the *Adventure* and *Beagle*, by Capt. P. P. King, R.N., and presented by him.

531 plants from Auckland and Campbell's Islands collected during Ross's Antarctic Voyage, and presented by Dr. J. D. Hooker ; in 1847, 444 plants were presented ; in 1854, 439 New Zealand plants.

247 plants from Guiana : presented by H. C. Rothery, Esq.

713 plants from Florida collected by Chapman : purchased.

600 North American plants collected by Geyer : purchased.

330 plants from Quito collected by Jameson : purchased ; in 1846, 277 Columbian plants were purchased ; in 1847, 102 Columbian mosses ; in 1848, 127 plants from Quito ; in 1849, 257 ; in 1850, 182 ; in 1857, 795 ; in 1858, 168.

318 plants from Texas collected by Lindheimer : purchased ; in 1850, 457 plants were purchased.

272 Chinese plants collected by Fortune : purchased ; in 1846, 55 plants were purchased ; in 1852, 70 plants, etc. ; in 1857, 52 plants, etc. ; in 1860, a series of woods ; in 1862, 100 plants from China and Japan.

228 Grecian plants collected by Heldreich : purchased ; in 1849, 1,787 plants from Greece and Asia Minor were purchased.

1846.

715 plants from Australia and the Pacific Islands, collected and presented by Sir Everard Home ; in 1853, 400 plants, with numerous cryptogams, were presented ; in 1854, 174.

1,500 South African plants collected by Zeyher : purchased ; in 1852, 55 woods were purchased.

650 Caucasian plants collected by Hohenacker : purchased.

580 plants from Buenos Ayres collected by Tweedie : purchased.

400 plants from the Canary Islands collected by Bourgeau : purchased ; the following year, 607 plants were purchased.

160 Arabian plants collected by W. Schimper : purchased ; in 1880, 84 plants were presented.

131 plants from Java collected by T. Lobb: purchased; in 1847, 213 plants from Java, Penang, and Singapore were purchased; in 1848, 48.

1847.

The collection of Edward Rudge, containing an arranged general herbarium of 4,138 species, and 772 plants from French Guiana collected by Martin: presented by Mrs. Rudge.

485 plants from New South Wales collected and presented by Sir Thomas Mitchell.

303 plants from Madagascar and Mauritius collected by Bojer: presented by the Society of Arts and Sciences, Mauritius.

533 Bolivian plants collected by Bridges: purchased.

132 Hepaticæ Britannicæ prepared by MacIvor: purchased.

408 Pyrenean mosses and hepatics collected by Spruce: purchased.

1848.

650 Portuguese plants collected by Welwitsch: purchased; in 1852, 200 plants were purchased; in 1853, 601; in 1856, 125 mosses.

412 Californian plants collected by Hartweg: purchased.

326 plants from New Mexico collected by Fendler: purchased; the following year, 1,297 plants were purchased.

1849.

An extensive collection, forming part of W. Griffith's Indian herbarium, was presented by the East India Company; a continuation was presented the following year.

294 plants from North Persia collected and presented by Thomas Lynch, Esq.

292 plants from the South of France and the Spanish Pyrenees, collected by Bourgeau: purchased; in 1850, 270 Spanish plants were purchased; in 1864, 611 plants from the French Maritime Alps, Spain, Algeria, Armenia, and Lycia; in 1865, 178 European; in 1868, 1,080 plants from Corsica and Savoy.

1850.

236 plants from the Dutch possessions in India, collected by Junghuhn and presented by Dr. de Vriese.

118 plants from the Sandwich Islands and the West Coast of Africa, collected and presented by Lieut. W. Strickland, R.N.

26 Syrian plants collected by W. K. Loftus : presented ; in 1853 and 1856, 72 Oriental plants were presented ; in 1856, 207 Assyrian plants were purchased.

635 South American plants with specimens of wood, etc., collected by Spruce : purchased ; in 1851, 378 plants, etc., were purchased ; in 1852, 367 plants, etc. ; in 1853, 422 ; in 1855, 405 ; in 1856, 256 ; in 1858, 664 ; in 1859, 363 ; in 1860, 300 ; in 1861, 910 ; in 1866, 997 ; in 1867, 1,403 mosses ; in 1892, 494 hepatics.

519 plants from New Mexico collected by C. Wright : purchased ; in 1853, 850 plants were purchased.

396 Spanish plants collected by Blanco : purchased.

208 plants from Algeria and Oran collected by George Munby : purchased.

200 plants from Forfarshire collected by W. Gardiner : purchased.

108 plants from New Zealand collected by Mossman : purchased ; in 1850, 107 cryptogams were purchased ; in 1860, 365 West Australian plants.

1851.

5,746 Brazilian plants collected by Gardner, being his own herbarium : purchased of his executors.

1852.

1,747 plants from Kumaun, Garhwal, and adjoining part of Tibet, collected by Capt. R. Strachey and presented by the East India Company.

114 woods from Ceylon, collected and presented by F. Layard, Esq.

A collection of Australian plants, chiefly from Allan Cunningham : presented.

780 specimens, representing 293 species of British sea-weeds : purchased from Mrs. Griffiths.

130 plants from Mount Olympus collected by Clemente : purchased.

A collection of fruits and fungi from St. Domingo, collected by Sallé : purchased ; in 1855, 46 fungi from Vera Cruz were purchased ; in 1857, 298 Mexican fungi ; in 1858, 524 Mexican plants and 275 from New Orleans.

1853.

151 plants from St. Domingo collected by Sir R. H. Schomburgk : presented.

250 plants from Ceylon collected by Thwaites : purchased ; in 1854, 433 plants were purchased ; in 1855, 1,392 ; in 1857, 234 ; in 1858, 152 ; in 1860, 166 ; in 1861, 105 ; in 1863, 129 ; in 1866, 113 ; in 1868, 117 ; in 1875, 445 cryptogams.

150 South African plants collected by J. H. Bowker : purchased.

100 plants from Moreton Bay collected by Strange : purchased.

1854.

550 Armenian plants collected by Huet de Pavillon : purchased ; in 1856, 363 Sicilian plants were purchased ; in 1857, 325 ; in 1867, 350 Oriental plants.

388 South American plants collected by W. Lobb : purchased.

316 Dalmatian plants collected by Botteri : purchased ; in 1867, 200 plants were purchased.

309 plants from Kurdistan and Loristan, collected by Olguin : purchased.

80 plants from New Zealand collected by T. S. Ralph : purchased ; in 1859, 87 ferns were purchased.

1855.

720 Indian plants collected and presented by Drs. J. D. Hooker and T. Thomson ; in 1859, 3,851 plants were presented ; in 1861, 2,395.

546 Mexican plants collected by Botteri : purchased ; in 1857, 470 plants were purchased.

496 plants from the South Pacific Islands, collected by John MacGillivray : purchased ; in 1860, 119 cryptogams from the New Hebrides were purchased ; in 1862, 91 plants ; in 1863, 89 plants from Lizard Island.

425 Oriental plants collected by Balansa : purchased ; in 1856, 487 plants were purchased ; in 1857, 144 ; in 1858, 170.

242 South Australian algæ, collected by Ray : purchased.

1856.

450 plants from the South Sea Islands, etc., collected during the voyage of H.M.S. *Herald* (1852), and presented by Sir J. Liddell, C.B.

257 plants of the same voyage, with 1,919 North American plants, chiefly collected by Sir John Richardson; 852 West Australian plants collected by A. Collie; and 477 miscellaneous plants with specimens of vegetable productions, were received from the Royal Naval Hospital, Haslar.

222 plants from the Pyrenean Mountains, Australia, collected and presented by D. E. Cooper, Esq.

144 plants from Tripoli and Central Africa collected and presented by Dr. E. Vogel.

395 plants from Tunis collected by Kralik: purchased.

182 Venezuelan ferns collected by Fendler: purchased.

166 Spanish plants collected by Rossmässler: purchased.

The following were purchased at the sale of the Horticultural Society's Herbarium: 1,460 plants from North-West America and California, collected by D. Douglas; 1,079 plants from Ceylon and 320 from the Sandwich Islands, collected by Macrae; 701 plants from West Tropical Africa, collected by G. Don; 317 plants from South Africa and Madagascar, collected by J. Forbes; 510 plants from the East Indies.

1857.

567 algæ from Australia, 119 from the Friendly Islands and 93 from Ceylon, collected by Harvey: purchased.

337 Javanese plants collected by Zollinger: purchased; the following year, 360 plants were purchased.

218 Chilian plants collected by Ph. Germain: purchased; the following year, 484 plants were purchased.

126 plants from Chagres collected by Fendler: purchased.

22 woods, etc., from Madeira, collected by N. H. Mason: purchased; the following year 400 plants were purchased.

1858.

964 Javanese plants, collected by Dr. Horsfield, including the types of Brown and Bennett's "*Plantæ Javanicæ Rariores*": presented by the East India Company.

The following were purchased at the sale of W. Gourlie's Herbarium: 1000 plants from Ohio, collected by J. Clarke; 635 Corsican plants, collected by Soleirol; 600 plants from New Zealand, collected by A. Sinclair; 590 Indian plants, collected by Dr. T. Thomson; 535 plants from Spain, Italy and Algeria, collected by Balansa, Bourgeau, Durieu and Jamin;

184 plants from Panama and North-West America, collected by Seemann.

625 Australasian plants collected by Leichardt and Lynd : purchased.

600 plants from Braemar collected by A. Croall : purchased.

285 Californian plants collected by Bridges : purchased.

174 Ceylon woods collected by Wright : purchased.

1859.

James Sowerby's Herbarium, containing the types of the plants figured in "English Botany" : purchased.

"Lichenes Hibernici exsiccati," prepared by Isaac Carroll : purchased ; in 1874 and 1875, large Irish and Scandinavian collections, formed by Carroll, were purchased.

1860.

406 plants from Kentucky collected by Dr. Shortt and presented by Sir John Richardson.

5,750 North American plants, forming Nuttall's Herbarium : purchased.

889 plants from Ecuador collected by Louis Fraser : purchased ; the following year, 156 Guatemalan plants were purchased.

Four centuries of "Lichenes ex herb. T. Salwey" : purchased 1860-62.

50 species forming fasc. 1 of Wirtgen's "Rubi Rhenani" : purchased ; in 1861, fasc. 2 was purchased ; in 1862, 32 species of *Mentha*.

1861.

134 West Himalayan plants collected by Captain P. Gerard : presented.

757 plants, chiefly Russian, from Prescott's Herbarium : purchased.

601 British lichens collected by W. Mudd : purchased ; in 1865, 80 specimens, illustrating his monograph of British *Cladoniae*, were purchased.

594 plants from the Fiji Islands collected by Seemann : purchased ; in 1865, 200 plants were purchased.

375 plants from Alabama collected by S. B. Buckley : purchased.

360 British mosses and 150 lichens collected by J. Sadler : purchased.

337 British sea-weeds collected and presented by Miss Cutler, and 149 by Mrs. Gray.

1,200 species forming 24 fascicles of the "Erbario Crittogamico Italiano," Ser. I : purchased at various times between the years 1861 and 1871. (For Series II, see 1869.)

300 plants from South-West Australia, collected by G. Maxwell : purchased.

258 British fungi and 51 Rubi collected by Rev. A. Bloxam : purchased ; in 1866, 49 Rubi were presented ; in 1870, 2,086 fungi of Britain and France were purchased ; in 1875, a collection of lichens was purchased ; in 1878, his scientific correspondence was presented by his son ; in 1893, 46 Rubi were presented by the Linnean Society ; in 1896, 200 British and 300 New Zealand cryptogams were presented by F. T. Mott, Esq.

254 plants from Senegal collected by Perrottet : purchased ; in 1862, 52 plants from Guadeloupe were purchased.

208 Mexican plants collected by Jürgensen : purchased.

201 North American plants collected by Carey and Watson : purchased.

176 plants from Madagascar and Mohilla collected by Boivin : purchased.

159 Senegal plants collected by Adanson, Leprieur and Perrottet : purchased.

136 plants from Mexico and Peru collected by Ruiz and Pavon : purchased.

117 Senegal plants collected by Heudelot : purchased.

100 species, forming two fasciculi of Ayres's "British Fungi" : purchased.

74 plants from Martinique, collected by Belanger, Garnier and Perrottet : purchased.

1862.

A valuable series of plants collected during the 17th and 18th centuries, including the herbaria of Ray, Dale, Rand and Nicholls : presented by the Apothecaries' Company.

3,300 European plants, forming fasc. 1-33 of Billot's "Flora Gallie et Germanie exsiccata" : further instalments were purchased in 1865 and in 1867.

2,542 cryptogams, forming the herbarium of George J. Lyon : purchased.

2,000 plants, forming the type collection of Seemann's "Botany of the Voyage of H.M.S. *Herald*": purchased.

974 species, forming fasc. 1-36 of Rabenhorst's "Lichenes Europæi exsiccati": purchased between the years 1862 and 1880.

Decades 1-66 of Rabenhorst's "Hepaticæ Europææ": purchased between the years 1862 and 1880.

800 species, forming cent. 1-8 of Rabenhorst's "Fungi Europæi," Ed. 2, Ser. i.: purchased.

465 plants from New Grenada collected by Schlim: purchased.

305 plants from Penang and Singapore collected by J. T. Walker: purchased.

Baxter's "Stirpes Cryptogamicæ Oxonienses": purchased.

46 British *Salices*, collected by J. E. Leefe: purchased; in 1870, 100 *Salices* were purchased; in 1872 and 1875 further purchases were made.

Count Limminghe's lichen collection: purchased.

1863.

457 Tasmanian plants collected and presented by Dr. J. Milligan; in 1868, 72 were presented.

313 mosses and 74 hepatics from the Simplon Pass: presented by Prof. Gagliardi; in the following year, 665 lichens were presented.

2,300 German plants, forming part of Reichenbach's "Flora Germanica exsiccata": purchased; in the following year, 500 were purchased.

218 plants and 450 fruits from Panama collected by Sutton Hayes: purchased; in the following year, 1,102 plants were purchased.

162 plants from the Zambesi collected by the Rev. J. Stewart: purchased.

103 *Compositæ* prepared by Schultz-Bipontinus: purchased; in 1866, 100 were purchased; in 1871, 253; in 1872, 870.

The following were purchased of the Linnean Society: 690 Australian plants collected by Ferd. von Mueller; 340 cryptogams from South Carolina collected by Ravenel; 250 Chilian *Compositæ* collected by Gillies; 87 plants from Madagascar collected by Hilsenberg; Dr. Pulteney's British Herbarium; herbarium of South Carolina plants formed by Walter.

1864.

216 fungi presented by C. E. Broome, Esq.

3,000 species, forming sixty livraisons of Desmazières' "Plantes Cryptogames de la France": transferred from the Department of Printed Books; in 1888, 280 fresh-water algæ: purchased.

2,000 mosses, chiefly British, forming A. O. Black's Herbarium: purchased.

Rabenhorst's "Algen Sachsens," comprising two hundred and fifty-nine decades, were purchased between the years 1864 and 1880.

Rabenhorst's "Fungi Europæi," Ed. 2, Ser. ii., containing forty-three centuries, were purchased between the years 1864 and 1901.

121 specimens, forming five parts of Rabenhorst's "Characeæ Europeæ," were purchased between the years 1864 and 1879.

450 British fungi collected by M. C. Cooke: purchased; in 1865, 250 fungi were purchased; in 1867, 200; in 1870, 100; in 1872, 307; in 1874, 100 fungi and 50 Discomycetes; from 1872-74, 332 preparations, illustrating the structure and fructification of British fungi, were purchased; in 1895, 100 fungi, chiefly Australian.

539 Cuban cryptogams collected by C. Wright: purchased; in 1865, 2,127 phanerogams were purchased; in 1870, 351 fungi; in 1884, 330 Graphideæ; in 1886, 56 lichens.

700 plants of the Rocky Mountains collected by Hall, Harbour and Parry: purchased.

672 Pyrenean plants collected by Fourcade: purchased.

550 plants from Palestine collected by B. T. Lowne: purchased.

100 plants forming two fasciculi of Van Heurck's "Plantes rares ou critiques de Belgique": purchased; in 1868, 1869, and 1870, other fasciculi were purchased.

1865.

1,500 British plants presented by Mrs. Anna Atkins.

1,078 South African plants collected by T. Cooper: presented.

1,000 Tyrolese plants collected by Rupert Huter: purchased; in 1866, 850 plants were purchased; in 1867, 300; in 1868, 425 Dalmatian; in 1870, 375 Tyrolese; in 1872, 405; in 1875, 488

from the Tyrol and North Italy; in 1876, 237 from South Europe; in 1881, 375 European.

2,850 Venezuelan plants collected by Moritz: purchased.

1,600 plants from Zululand collected by W. T. Gerrard: purchased.

400 Sicilian plants, forming first four centuries of Todaro's "Flora Sicula": purchased; in 1867, 1868, cent. 5, 6 were purchased; in 1869, cent. 7, 8; in 1871, cent. 9-12; in 1875, cent. 13, 14.

369 Swedish plants collected by Nyman: purchased.

273 European mosses contained in Schimper's "Pugillus Muscorum": purchased.

269 plants from the Shetland Islands collected by Ralph Tate: purchased.

1866.

Collection of ferns (upwards of 10,000) made by John Smith, of Kew: purchased.

5000 microscope-slides of Diatomaceæ, forming the entire collections of Gregory and Greville: purchased.

600 German plants, forming first six centuries of F. Schultz's "Herbarium Normale": purchased; in 1868, cent. 7-10 were purchased; in 1886, cent. 20, 21 (C. Keck, ed.); in 1887, cent. 22, 23; in 1888, cent. 24; in 1889, cent. 25, 26; in 1892, cent. 27-29; in 1894, cent. 30, and 31 (Dörfler, ed.); in 1897, cent. 32-34; in 1898, cent. 35, 36; in 1899, cent. 37-39; in 1900, cent. 40; in 1901, cent. 41; in 1902, cent. 42, 43.

536 specimens being Sullivant and Lesquereux's "Musci Americani exsiccati," Ed. II.: purchased.

475 plants from Formosa collected by R. Oldham: purchased; in 1870, 663 plants were purchased.

400 species, being Mdlle. Libert's "Plantæ Cryptogamicæ" of the Ardennes: purchased.

370 specimens of Leighton's "Lichenes Britannici": purchased; the following year, 50 species were purchased.

112 plants from Old Calabar collected by W. G. Milne: purchased.

1867.

1,300 plants from the East Indies and 1,000 from the Neilgherry Mountains, collected by Metz: purchased.

835 marine algæ collected by Kützing and others: purchased; the following year, Kützing's entire collection of about 2,000

gatherings of Diatomaceæ, together with notes and sketches, was purchased.

785 plants and 42 woods from Egypt and Ethiopia, collected by Schweinfurth : purchased.

18 fascicles of British algæ prepared by J. Cocks : purchased.

238 plants from Chontales, Nicaragua, collected by B. Seemann : purchased.

227 plants from Senegambia and 256 from the Neilgherry Mountains, collected by Perrottet : purchased.

Wirtgen's "Herbarium Rhenanum" : purchased 1867-71.

134 cryptogams from South Africa and the West Indies, collected by Breutel : purchased ; in 1871, 873 mosses from South Africa, Central and Arctic America ; purchased.

1868.

994 plants from Styria, Dalmatia, and Italy, presented by Dr. R. C. Alexander Prior.

333 Australian plants collected and presented by Charles Moore, Esq.

295 British lichens presented by Dr. Holl.

4,824 cryptogams, being Hepp's herbarium : purchased.

1,250 Bolivian plants collected by Mandon : purchased.

1,093 Pyrenese plants collected by Petit : purchased.

966 Algerian plants collected by Romain : purchased.

954 plants from French Guiana collected by Sagot : purchased.

588 Italian plants collected by Puccinelli : purchased.

564 Chilian plants collected by Philippi : purchased ; in 1893, several specimens of Malvaceæ were presented.

544 plants from Martinique collected by Hahn : purchased ; in 1870, 444 plants were purchased.

500 Californian plants collected by Bolander : purchased.

100 microscope-slides of Eulenstein's "Diatomaceæ Typicæ" : purchased.

50 lichens from the Channel Islands collected by Lerbalestier : purchased ; in 1873, 230 lichens were purchased ; in 1880, 350 British and 150 Egyptian.

1869.

110 Australasian plants collected by Baron Ferd. von Mueller : presented ; in 1878, 286 plants were presented ; in

1884, 30 ; in 1885, 783 ; in 1886, 161 ; in 1887, 675 ; in 1889, 402 ; in 1890, 692 ; in 1891, 343 ; in 1892, 164 ; in 1893, 56 ; in 1894, 22.

700 plants from Quito collected by Jameson and presented by J. N. Kuczinski, Esq.

211 North American plants collected and presented by Dr. W. A. Bell.

110 Styrian and 22 Sicilian plants collected and presented by the Chevalier Pittoni.

48 plants from Gibraltar collected and presented by H. A. Hurst, Esq. ; in 1871, 62 plants from Lower Egypt were presented ; in 1876, 99 Egyptian ; in 1881, 200.

2,000 Abyssinian plants collected by W. Schimper : purchased ; in 1871, 90 mosses and hepatics were purchased ; in 1872, 270 plants ; in 1890, 224 plants were acquired by exchange ; in 1891, 265.

650 plants from the European collection formed by Dr. Rostan : purchased.

416 fungi from South Carolina collected by Ravenel : purchased.

323 Nicaraguan plants collected by Ralph Tate : purchased.

1,100 species, forming twenty-two fasciculi of the " *Erbario Crittogamico Italiano*," Ser. II., were purchased between the years 1869 and 1881. (For series I, see 1861.)

The following, from N. B. Ward's collection, were purchased of his executors : 3,094 South African plants collected by Harvey, Ecklon, Stanger, etc. ; 1,014 Indian plants collected by Wight ; 784 North American plants collected by Gray, Sullivant, etc. ; 560 Madeiran plants collected by Lemann, Lippold, etc. ; 431 Malaccan plants collected by Griffith ; 225 Californian plants collected by Coulter ; 213 North American Carices collected by Sartwell ; 166 Swan River plants collected by Mylne ; 113 plants from the Fiji Islands collected by Harvey ; 96 North European Salices collected by Læstadius ; 77 Athenian plants collected by Boissier.

1870.

67 plants from the Island of Banka, Malay Archipelago : presented by Dr. R. H. C. C. Scheffer ; in 1872, 276 Javanese woods were presented.

2,625 Oriental plants collected by Haussknecht : purchased.

100 British lichens collected by J. M. Crombie : purchased ; in 1871, 200 lichens were purchased ; in 1872, 100 ; in 1873, 450 ;

in 1874, 450 ; in 1877, 350 ; in 1890, 1,287 ; in 1891, 138 ; in 1900, 54.

250 critical British plants collected by W. T. Thiselton Dyer : purchased ; in 1871, 100 plants, purchased.

175 Juncaceæ, and 165 Gramineæ, being Baenitz's published sets : purchased.

100 plants from Old Calabar collected by Robb : purchased.

82 fossil plants prepared by Norman : purchased ; in 1871, 73 fossil woods were purchased ; in 1873, 122 fossils.

1871.

343 cellular cryptogams presented by Dr. W. Lauder Lindsay ; in 1874, a collection of fossil plants was presented.

267 Cape plants collected by R. Trimen : presented.

Auerswald's herbarium of 17,000 European and American plants : purchased.

1,625 Scandinavian plants collected by Ahlberg : purchased.

1,450 mosses, forming twenty-nine fasciculi of Rabenhorst's "Bryotheca Europæa," were purchased between 1871 and 1884.

125 vascular cryptogams of Europe, forming five fasciculi of Rabenhorst's published set.

1,030 Russian plants collected by Gruner, Bunge, Schweinfurth, Le Jolis, etc. : purchased ; and 556 from Catherinslav and 371 from Woronetz by Gruner.

1,000 Yucatan plants collected by A. Schott : purchased.

410 lichens of Italy collected by Anzi : purchased ; in 1875, a further 988 were purchased.

400 North African plants collected by E. G. Paris : purchased ; in the following year, 100 plants were purchased.

400 Belgian cryptogams collected by Westendorp and Wallays : purchased.

390 South American mosses collected by J. Weir : purchased : in the ensuing year, 189 plants were purchased.

378 Russian plants collected by Golde : purchased ; in 1874, 133 plants were purchased ; in 1875, 100.

323 Malayan plants collected by A. C. Maingay : purchased ; in 1882, 135 Burmese lichens were purchased.

304 British fungi collected by W. G. Smith : purchased ; in subsequent years 47 specimens and 216 microscope preparations were acquired.

300 wood sections prepared by Nördlinger : purchased ; a

complete series of his "Holzquerschnitte" was subsequently purchased.

272 Salices collected by Wimmer : purchased.

225 German fungi prepared by Holl and Schmidt : purchased.

219 Italian plants collected by Liberato Sabbati, 1718 ; transferred from Kew.

200 cryptogams collected by Kneiff and Hartmann : purchased.

185 plants from the Island Sviatoi, Caspian Sea, collected by Bruhns : purchased.

168 plants, forming Schultz's "Herbarium Floræ Istriacæ" : purchased.

150 plants from the Engadine collected by J. L. Krättli : purchased.

125 Scandinavian plants collected by Zetterstedt : purchased.

105 Portuguese plants collected by Daniel Sharpe : purchased.

1872.

Plants from Dr. J. A. Murray's Herbarium : purchased.

1,800 rare French plants, collected by Jordan, Kralik, Grenier, etc. : purchased.

880 New Caledonian plants collected by Pancher : purchased ; the following year, 73 woods and stems were purchased.

650 Spanish plants collected by Graells : purchased.

150 Scandinavian mosses and 650 lichens from Lapland collected by Hellbom : purchased ; in 1891, 200 Scandinavian lichens were purchased.

633 plants from Oregon collected by Elihu Hall : purchased ; the following year, 850 plants from Texas were purchased.

700 "Schweizerische Kryptogamen" in 14 fascicles, by Wartmann and Schenck : purchased.

385 North Italian plants collected by Cesati, Caruel and Savi : purchased.

350 Corsican plants collected by P. Mabille : purchased.

A complete set of Berkeley's "British Fungi" (350 specimens) : purchased.

1,300 Austrian fungi prepared by F. von Thümen : purchased 1872-75.

250 Scandinavian algæ collected by Areschoug : purchased ; in 1875, 150 algæ were purchased.

225 plants and 19 fruits from Cordova collected by E. Fielding : purchased.

191 plants from Cherson, Russia, collected by Rehmann : purchased.

187 plants from Malta and Italy, collected and presented by J. T. Duthie, Esq. : in 1873, 128 plants were presented ; in 1874, 300 were purchased.

150 plants from Crete and 90 from Martinique collected by Sieber : purchased.

131 plants from Demerara collected by C. Appun : purchased.

110 Cuban plants collected by Ramon de la Sagra : purchased.

100 species, forming first two fasciculi of Lindeberg's "Hieracia Scandinaviæ" : purchased ; in 1878, fasc. 3 was purchased ; in 1888, 52 species of his "Herbarium Ruborum Scandinaviæ."

80 species, forming first two fasciculi of Nordstedt and Wahlstedt's Scandinavian "Characeæ" : purchased ; in 1875, fasc. 3 was purchased.

1873.

3000 British plants : presented by Dr. Trimen.

432 Burmese cryptogams collected and presented by S. Kurz.

900 species, forming nine centuries of Karsten's "Fungi Fenniæ" : purchased.

595 plants from Suez, Arabia and East Africa collected by Hildebrandt : purchased ; in 1874, 264 plants from Zanzibar were purchased ; in 1875, 411 East African ; in 1878, 357 ; in 1883, 707 from Madagascar ; in 1884, 63.

525 Californian plants collected by Kellogg : purchased.

The Moss herbarium of William Wilson was purchased.

564 plants from Madagascar collected by Hilsenberg and Bojer : purchased.

458 Madeiran plants collected by Mandon : purchased.

384 Mexican plants collected by Ghiesbreght : purchased.

375 grasses collected by Trinius : purchased.

400 mosses from Normandy prepared by Étienne : purchased 1873, 1875.

256 New Caledonian plants collected by Vieillard and Deplanche : purchased.

240 plants from Greece and Crete collected by Heldreich : purchased ; in 1875, 255 plants were purchased ; in 1886, 87 ; in 1888, 100 ; in 1889, 323 ; in 1896, 100 ; in 1897, 100.

134 ferns from Guadeloupe collected by L'Herminier : purchased.

106 Glumaceæ and 270 cryptogams from the Antilles collected by Husnot : purchased.

Three centuries of Plowright's "Sphæriacei Britannici" : purchased 1873, 1875, 1879.

100 Welsh lichens collected by Rev. W. A. Leighton : purchased ; in 1875, 130 were purchased.

60 West Australian plants collected by Brewer : purchased ; in 1893, 354 were acquired.

Mougeot and Nestler's cryptogamic plants of the Vosges (15 centuries) : purchased.

100 specimens of fungi prepared by J. English.

1874.

506 plants and a series of fruits from Hong Kong collected and presented by the Rev. James Lamont.

Herbarium of North Lancashire plants presented by Miss E. Hodgson.

250 plants from Brisbane collected by Amalia Dietrich : purchased.

209 ferns from Samoa, Tonga and Viti collected by E. Graeffe : purchased.

150 Tyrolese lichens collected by F. Arnold : purchased.

29 fascicles of Rehms' "Ascomyceten" were purchased between the years 1874 and 1902.

100 Russian plants collected by Meinshausen : purchased ; the following year, 100 were purchased.

24 cryptogams from Spitzbergen collected by the Rev. A. E. Eaton : presented ; in 1876, 139 cryptogams from the Cape and 124 from Kerguelen's Land were presented.

1875.

254 Indian plants collected and presented by C. B. Clarke, Esq. ; in 1879, 951 plants were presented ; in 1881, 2,651 and a set of Cyrtandraceæ ; in 1882, 2,335 ; in 1883, 182 ; in 1888, 910 ; in 1889, 190 ; in 1890, 26 ; in 1891, 2,369 ; in 1892, 312 ; in 1893, 490 ; in 1897, 564.

510 South African plants collected and presented by P. MacOwan, Esq. ; in 1876, 400 species were purchased ; in 1886, 200

473 British plants collected and presented by Miss Chandler.

301 Chinese plants collected and presented by F. B. Forbes, Esq.

Herbarium of Indian ferns of Col. Beddome : purchased ; in 1885, nearly 10,000 plants were purchased ; in 1887, 58 mosses ; in 1890, 706 plants.

773 Chilian plants collected by E. C. Reed : purchased.

667 lichens from New Granada, being Lindig's study set : purchased.

600 German fungi collected by Fuckel : purchased.

Sixteen centuries of P. A. Saccardo's "Mycotheca Veneta" : purchased between the years 1875 and 1881.

450 specimens, Nylander and Norrlin's "Herbarium Lichenum Fennicæ" : purchased 1875-1882.

Twenty-three centuries of Thümen's "Mycotheca Universalis" : purchased between the years 1875 and 1884.

The following were purchased from E. F. Nolte's Herbarium : 1,285 plants from Schleswig-Holstein collected by Hansen ; 1,000 Scandinavian plants forming Fries' "Herbarium Normale" ; 865 species forming Funck's "Cryptogamische Gewächse" ; 611 plants from Greenland and Iceland, collected by Vahl and Hornemann ; 200 German lichens prepared by Flörke and 100 vascular cryptogams by Reichenbach ; 200 algæ of East Friesland prepared by Jurgens ; 180 Oriental plants collected by Forskål ; 150 North American lichens and 82 New England plants collected by Tuckerman ; a large collection of Potamogeton, 52 species of Batrachium and 14 species of Najas ; and a number of types of plants described by Cavanilles, Delile, Thuillier, Allioni and others.

100 plants forming George Don's "Herbarium Britannicum" : purchased.

1876.

The study set of Robert Brown's Australian plants and other specimens : bequeathed by J. J. Bennett.

The second set of Welwitsch's African plants was acquired.

The moss herbarium of James Dickson : purchased.

360 plants from the Island of Rodriguez, collected by Dr. Bayley Balfour during the *Transit of Venus* expedition : presented by the Royal Society ; in 1879, a set of cellular plants was presented.

294 Formosan plants collected and presented by the Rev. W. Campbell.

200 plants from New Zealand collected and presented by Sir James Hector.

160 palms from the Amazon region collected and presented by Dr. J. Trail.

149 Cape plants collected and presented by Dr. Hahn.

1877.

The Herbarium of Robert James Shuttleworth, containing more than 170,000 specimens from all parts of the world; purchased. It included Roemer's Herbarium, and extensive collections made by Shuttleworth, in Europe; by Frivaldsky, in Turkey; Richter, in Hungary; Mabille and Debeaux, in Corsica; Bourgeau, in the Balearic Islands, Spanish Pyrenees and Rhodes; Willkomm, in South Spain; Auzendli and others, in Algiers; Du Parquet, in Egypt; Aucher-Eloy and Kotschy, in the Levant; beside the published series of Reichenbach, Fries, Huet du Pavillon, &c., greatly enhanced in value by numerous critical notes by Shuttleworth. A very large number of North American plants collected by Lindheimer, Beyrich, Fendler, Blodgett, and especially by Rugel; Mexican plants collected by Jurgensen, Hartweg and Berlandier; and South American collections made by Hostmann, Linden, Gardner, Jameson, Mathews and others. The Asiatic portion contained a very fine and extensive series of the plants of Zollinger, from Java and Japan; of Kollmann, from Java; of Cuming, from the Philippines; of Fortune, from China; of Walker and Lobb, from Singapore; of Campbell, Christie, Helfer and Wallich, from India; and of Karelin and Kiriloff, from Dzungaria. The African collections comprise the plants of Schimper and Kotschy, from Nubia and Abyssinia; of Brunner, from Senegal and the Cape Verde Islands; and of Drège, Krauss and others from South Africa. The Australian collections include the plants of Drummond, Preiss and Sieber. The cryptogams, which number 20,000, contain the collections of Schærer, Desmazières, Mougeot and Nestler, Kützing, Crome, Rugel, Braun, Schmidt and Kunze, Wartmann and Schenk, Salwey and many others.

The herbarium of Hepaticæ, formed by Hampe, containing upwards of 6,000 specimens: purchased; in 1881, Hampe's moss herbarium of about 25,000 specimens was purchased.

1,098 plants collected by H. N. Moseley during the *Challenger* expedition: presented by the Lords of the Treasury; the following year, 1,606 plants were presented.

1878.

230 West tropical African plants collected by Kalbreyer and presented by Messrs. J. Veitch and Sons; in 1885, 20 plants were presented.

114 Brazilian plants collected by E. Warming: presented.

570 plants from the Samoan Islands collected by Rev. S. J. Whitmee: purchased.

439 plants from Paraguay collected by Balansa: purchased; in 1885, 914 plants were purchased.

400 plants from East Lapland collected by Fellman: purchased.

300 Grecian plants collected by Pichler: purchased.

Twenty-nine fasciculi of Wittrock and Nordstedt's "*Algæ aquæ dulcis exsiccata*": purchased between the years 1878 and 1897.

Eight centuries of Ravenel's "*Fungi Americani*": purchased between the years 1878 and 1882.

175 plants from Uruguay and 136 from the Argentine Republic, collected by Lorentz: purchased.

3,497 Syrian plants collected by G. E. Post: acquired at various dates between 1878 and 1902.

78 ferns from Trinidad collected by Fendler: purchased; in 1880, 50 ferns were purchased; in 1881, 642 plants; in 1891, 43 cryptogams were received.

Kunze's "*Fungi Selecti*" (410 specimens): purchased 1878-81.

1879.

The extensive herbarium formed by John Miers: bequeathed; in 1880, 170 Brazilian woods together with spirit specimens of Burmanniaceæ, etc., were presented by his son; in 1887, 2,006 ferns.

Edward Newman's fern herbarium was presented by his son.

230 plants from North Borneo, collected by F. W. Burbidge and presented by Messrs. Veitch.

A collection of plants from Damara-Land, made by T. G. Een: purchased.

490 South African mosses collected by A. Rehmann: purchased; in 1881, 942 plants were purchased; in 1883, 1,234; in 1886, 697 mosses; in 1890, 106 hepatics.

315 plants from New Zealand collected by S. Berggren: purchased; in 1889, 58 fresh-water algæ were purchased.

Three centuries of Oudeman's "Fungi Neerlandici": purchased 1879-80.

68 plants from the Eastern Archipelago collected by H. O. Forbes: purchased; in 1880, 165 plants were purchased; in 1883, 1,500 plants together with a series of fruits; in 1884, 990 plants and 120 fruits; in 1886, 911 plants and 74 woods; in 1888, 1,020 plants.

31 South American plants collected by F. Simons: purchased; in 1880, 25 plants were purchased; in 1881, 150.

1880.

422 plants from Kurrum Valley, Afghanistan, collected and presented by Dr. J. E. T. Aitchison; in 1881, 196 plants were presented; in 1887, a set of plants collected during the Afghan Boundary Expedition.

1,602 British plants collected and presented by T. R. Archer Briggs, Esq., between 1880 and 1891.

2,482 British plants collected by A. French: purchased.

984 North African plants collected by Gandoger: purchased.

1,464 European lichens, chiefly British, and 189 preparations of cellular plants, purchased of W. Joshua; and 850 cryptogamic slides purchased 1881-86.

468 Spanish plants collected by Huter, Porta and Rigo; in 1891, 497; in 1892, 478: purchased; in 1886, 168 plants of the Balearic Islands were purchased.

443 Italian plants collected by Strobl: purchased.

300 European algæ collected by A. Le Jolis: purchased.

177 plants from the Argentine Republic collected by Hieronymus: purchased.

151 plants from Dzungaria collected by Schrenk: purchased.

144 ferns from Madagascar collected by G. Shaw: purchased.

800 Sicilian plants collected by Lojacono: purchased at intervals between 1880 and 1888.

1881.

1,027 South African plants collected and presented by Harry Bolus, Esq.; in 1896, 70 plants were presented.

British, European and other plants presented by A. Bennett, Esq. Similar contributions have been made by Mr. Bennett at intervals up to the present time.

34 specimens from the Botanic Gardens, Saharanpur: presented by J. F. Duthie, Esq.; in 1882, 187 Himalayan plants

were presented; in 1884, 590 Indian plants were acquired by exchange; in 1885, 350; in 1886, 276; in 1887, 14 cryptogams; in 1888, 301 plants; in 1889, 349 plants were presented; in 1891, 120; in 1895, 641 flowering plants and 98 cryptogams from Kashmir; in 1896, 352 from Kashmir and 100 from Pamir; in 1897, 150 North-West Indian cryptogams; in 1898, 735 plants; in 1899, 95; in 1900, 291 cryptogams.

A collection of Japanese woods was presented by J. Bisset, Esq.; in 1882, an extensive plant collection was presented; in 1889, 109 cryptogams.

52 plants from Sussex, collected and presented by F. C. S. Roper, Esq.; and 80 in 1882.

345 British plants collected by G. C. Druce, Esq., were presented by him between the years 1881 and 1902.

1,554 North American flowering plants collected by A. H. Curtiss: purchased from 1881 to 1887; and 136 algæ: purchased, 1896-98.

1882.

461 British plants presented by the Rev. W. H. Painter; others presented in 1883, 1884, and 1894, amounting in all to 1,730.

392 British plants from C. Bailey, Esq.; in 1883, 116; in 1884, 97: presented.

1,962 Mexican plants collected by C. C. Parry and G. Vasey: purchased.

A collection of 1,155 preparations of Diatoms, made by Rev. E. O'Meara, was purchased.

500 European Cryptogamia collected by P. Sintenis: purchased.

475 plants from Arizona, etc., collected by J. G. Lemmon: purchased: in 1884, 605 plants were purchased: in 1886, 204.

300 plants from Washington Territory, collected by W. A. Suksdorf: purchased; in 1883, 219 plants were purchased; in 1884, 155; in 1886, 208 plants from Colorado.

200 algæ from Mauritius collected by Robillard: purchased.

550 microscope-preparations of Belgian diatoms, forming ser. 1-22 of Van Heurck's "Types du Synopsis des Diatomées": purchased at intervals between the years 1882 and 1885.

1883.

538 American plants presented by F. C. S. Roper, Esq.

373 plants from Socotra, collected and presented by Prof. Bayley Balfour.

27 Australian orchids presented by R. D. Fitzgerald, Esq.; in 1885, 8, and in 1891, 200 orchids were acquired by presentation and exchange.

228 Chinese plants collected by Dr. Bretschneider: acquired by exchange.

83 species of North American plants: acquired by exchange from Prof. Asa Gray; in 1884, 55 plants were acquired; in 1886, 14 were presented.

830 Caucasian plants collected by Brotherus: purchased.

700 plants from New Zealand collected by T. Kirk: purchased; in 1897, 90 plants were presented.

531 plants from Madagascar collected by the Rev. R. Baron: purchased; in 1884, 227 plants were purchased; in 1886, 379; in 1887, 124; in 1894, 196.

497 algæ from Morocco collected by Schousboë: purchased.

The Rev. Hugh Davies's herbarium, containing the type-specimens of his "Welsh Botanologia": purchased.

An arranged collection of British mosses made by the Rev. H. H. Wood: purchased.

450 plants from Madagascar collected by the Rev. W. Deans Cowan: purchased; in 1885, 25 plants: purchased.

368 Californian plants collected by S. B. Parish: purchased; in 1897, 110 plants were purchased; in 1898, 100.

340 South African plants collected by Ecklon and Zeyher: purchased.

250 French mosses collected by Roze and Bescherelle: purchased.

290 specimens, forming the four fascicles of Carrington and Pearson's "Hepaticæ Britannicæ exsiccatae": purchased between the years 1883 and 1890.

100 slides of Delogne's "Diatomées de Belgique": purchased.

250 specimens, forming fasc. 1-10 of E. M. Holmes's "Algæ Britannicæ rariores": purchased between the years 1883 and 1900.

22 orchids and 3 aroids were presented by Messrs. J. Veitch and Sons; similar presentations, including 280 orchids and 50 pitcher plants, were subsequently received.

1884.

Robert Pocock's herbarium of Kentish plants, presented by G. M. Arnold, Esq.

A large collection of Indian plants, presented by A. P. Young, Esq.

482 plants and 16 fruits from the United States and Mexico collected and presented by William Carruthers, Esq.

257 Kirkcudbright plants, collected and presented by F. R. Coles, Esq.

253 Australian plants collected and presented by the Rev. James Lamont; in 1890, 109 were presented; in 1891, 96 mosses.

112 plants from St. Helena collected and presented by F. E. Grant, Esq.

110 plants from Shetland and Orkney collected and presented by Rev. W. E. Smith.

193 British plants collected and presented by W. H. Beeby, Esq., between 1884 and 1891.

The British herbarium and cryptogamic collection formed by Dr. J. F. Young were transferred from Kew Herbarium, together with the Botanical Record Club's collections of British plants; in 1885 and 1887, further instalments were presented by the club.

952 South African plants collected by J. Medley Wood; in 1885, 128 were acquired; in 1886, 138; in 1888, 89; in 1889, 66; in 1890, 111; in 1892, 117; in 1894, 116; in 1895, 113; in 1897, 158; in 1898, 95; in 1900, 138; in 1901, 118.

121 specimens of A. Engler's "*Araceæ exsiccatae*": acquired by exchange; the following year, 100 specimens were acquired.

The extensive collection of Roses formed by Alfred Déséglise, containing his type species and the materials on which his numerous monographs were based: purchased.

An arranged collection of about 7000 algæ and 372 slides of diatoms, formed by G. Dickie: purchased.

2,745 North American phanerogams and 164 cryptogams, collected by Marcus E. Jones: purchased; in 1887, 696 phanerogams and 28 cryptogams were purchased; in 1896, 1,146 phanerogams and 112 cryptogams; in 1898, 1,519 phanerogams and 141 cryptogams.

976 plants from Asia Minor, collected by P. Sintenis: purchased; in 1892, 362 Turkish plants were purchased; in 1893, "*Iter orientale*"; in 1895, 300 plants from Asia Minor; in 1896, 239 from Armenia; in 1899, 1,585 from Porto Rico; in 1900, 1,011; in 1902, "*Iter transcaspico-persicum*," cent. 1-4.

4,900 specimens, forming centuries 1-49 of Sydow's "*Myc-*

theca Marchica": purchased at intervals within the years 1884-99.

483 Mexican plants collected by Schaffner: purchased.

421 plants from Borneo collected by Grabowski: purchased.

Four centuries of Peter's "*Hieracia Nægeliana*": purchased, 1885, 1886.

289 Mexican plants collected by Kerber: purchased; the following year, 400 plants were purchased.

1885.

617 South African plants presented by the Rev. W. Moyle Rogers.

G. Maw, Esq., presented his collection of *Crocus*, consisting of 416 species, illustrating his monograph of the genus.

315 plants collected by E. F. im Thurn during the expedition to Roraima, British Guiana: presented.

313 plants from Morocco presented by John Ball, Esq.

299 Tropical African plants collected by Sir H. H. Johnston: presented; in 1887, 109 plants were presented; in 1893, 54.

210 British fruits and seeds collected and presented by Clement Reid, Esq.; from 1890 to 1902, 183 were presented.

116 Indian plants collected and presented by J. S. Gamble, Esq.; in 1887, 747 plants were presented.

28 Italian plants collected and presented by H. Groves, Esq.: in 1887, 511 plants were purchased.¹

10 orchids grown in the Botanic Gardens, Dublin, were presented by F. W. Moore, Esq.; in 1887, 59 were presented; and over 100 since.

1,072 plants from Japan, China, and Manchuria, collected by Maximowicz, and 663 Turkestan plants collected by Regel, were acquired by exchange from the Imperial Botanic Gardens, St. Petersburg; in 1890, 467 plants collected by Maximowicz were similarly acquired.

593 specimens of Kerner's "*Flora exsiccata Austro-Hungarica*" were acquired by exchange; further instalments were acquired at various dates.

355 Javanese plants collected by Blume and others: acquired by exchange.

120 Californian plants collected by E. L. Greene; in 1886, 59 plants were acquired; in 1895, 185.

2,275 South American plants collected by R. Pearce: purchased.

1,162 Arabian plants collected by H. C. Hart.

437 plants from the Comoro Islands collected by L. Humblot : purchased ; in 1887, 159 were purchased.

200 specimens from MacOwan and Bolus' "Herbarium Normale Austro-Africanum" ; in 1887, 200 ; in 1888, 300 ; in 1889, 211 ; in 1891, 100 ; in 1892, 100 ; in 1893, 200 ; in 1896, 135 ; in 1898, 73 ; in 1899, 200.

315 Australasian algæ collected by Harvey : purchased ; in 1900, 67 algæ were acquired by exchange with Trinity College, Dublin.

165 specimens of Austin's "Hepaticæ Americanae" : purchased ; in 1893, 45 specimens were acquired by exchange.

160 East Friesland cryptogams, chiefly mosses, prepared by Eiben : purchased, 1870, 1885.

154 East Tropical African plants collected by the Rev. W. E. Taylor : purchased ; in 1886, 929 plants were purchased ; in 1887, 1,459 ; in 1888, 670.

144 South African Iridæ from Zeyher and Pappe's collection : purchased.

129 Bedfordshire mosses collected by J. Saunders : purchased.

135 specimens, forming lief. 1-6 of Herpell's "Sammlung präparirten Hutpilze" : purchased between the years 1885 and 1892.

230 species, forming fasc. 1-5 of Farlow, Anderson and Eaton's "Algæ exsiccatae Americae Borealis" : purchased between the years 1885 and 1889.

1886.

An arranged collection of about 40,000 British and foreign fungi, containing many type species : bequeathed by C. E. Broome, Esq.

1,323 Australian plants, with several fruits, gums, etc., collected and presented by the Rev. T. S. Lea ; the following year, 54 Australian and 125 Hawaiian plants were presented.

209 Japanese plants collected and presented by C. Maries, Esq.

191 plants from Uruguay presented by J. C. Mansel-Pleydell, Esq.

186 ferns from Perak collected by the Rev. B. Scortechini : presented ; the following year, 49 species of Loranthus and Ficus were presented.

156 plants from Manitoba collected and presented by R. Miller Christy, Esq.

74 Indian plants collected by G. Watt: presented; the following year, 174 gatherings of Arctic diatoms and 56 Indian algæ were presented.

523 Australian algæ collected by J. Bracebridge Wilson, and presented from time to time, 1886-93.

Plants from Western America and the Pacific Islands collected by Archibald Menzies, with the herbarium formed by Zier: acquired by exchange.

188 specimens of *Ficus*, 26 of *Pedicularis*, and 21 of *Primula* were acquired, by presentation and exchange, from Sir G. King and Major D. Prain, successive directors of the Royal Botanic Gardens, Calcutta; in 1887, 86 Indian and Malayan plants; in 1888, 447; in 1889, 415; in 1890, 375; in 1891, 613; in 1892, 338; in 1893, 537; in 1894, 670; in 1895, 748; in 1896, 453; in 1897, 798; in 1898, 824; in 1899, 161; in 1900, 513; in 1901, 380; in 1902, 250.

29 Canadian fruits collected by Profs. John and James M. Macoun; in 1887, 1,427 North American plants; in 1888, 294; in 1889, 234; in 1891, 1,122; in 1893, 207; in 1894, 534; in 1895, 101; in 1896, 333; in 1897, 75.

2,051 mosses and hepatics, chiefly species described by Dr. S. O. Lindberg: purchased.

1,347 plants from the Himalayas and Tibet, collected by the brothers Schlagintweit: purchased; in 1900, 703 plants were purchased.

1,300 specimens, forming thirteen centuries of Mougeot, Dupray, and Roumeguère's "*Algues de la France*," together with three supplementary centuries of "*Reliquiæ Brebissonianæ*": purchased between the years 1886 and 1892.

450 "*Bryaceæ Scandinaviæ exsiccatae*," in 15 fascicles, by Hartman: purchased.

447 Californian plants collected by C. R. Orcutt: purchased; the following year, 400 plants were purchased.

424 Mexican plants collected by C. G. Pringle: purchased; in 1889, 158 were purchased: in 1890, 358; in 1893, 534; in 1894, 255; in 1895, 429; in 1896, 225; in 1897, 300; in 1898, 160; in 1899, 160; in 1900, 260; in 1901, 190.

362 Grecian plants collected by Orphanides: purchased; in 1887, 360 were purchased; in 1890, 320.

215 plants from New Mexico collected by E. Palmer: purchased; in 1887, 683 Mexican plants were purchased; in 1888, 453 Californian; in 1889, 160 were presented; in 1893, 29

Mexican Malvaceæ were presented ; in 1895, 302 Mexican plants were purchased ; in 1896, 280 plants and 22 fruits ; in 1898, 680 plants ; in 1899, 423.

197 plants from the Pacific Coast collected by T. Howell : purchased.

750 specimens, forming fasc. 1-15 of Hauck and Richter's "Phykotheke universalis" : purchased between the years 1886-1896.

200 specimens, forming fasc. 1-4 of De Toni and Levi-Morenos' "Phycotheca Italica" : purchased between the years 1886 and 1892.

Wittrock's "Erythrææ exsiccatae" (fasc. 1, 2) : purchased ; in 1890, fasc. 3, 4 were purchased.

1887.

750 plants from Pernambuco, collected and presented by the Rev. T. S. Lea, Messrs. H. N. Ridley, and G. A. Ramage, and 200 plants from Fernando de Noronha collected by Mr. Ridley and presented by the Royal Society.

160 plants from Demerara and 86 from British Guiana, collected and presented by G. S. Jenman, Esq. : in 1890, 367 plants from British Guiana were presented.

294 British plants presented by the Rev. T. A. Preston.

101 Jamaican plants collected by W. Fawcett, Esq., and acquired by exchange ; in 1888-1893, collections of fruits and seeds were presented ; in 1889, 129 plants ; in 1896, 84 cryptogams ; in 1897, 191 plants ; in 1898, 52 ferns ; in 1899, 167 plants ; in 1900, 85 ferns ; in 1901, 100 plants.

198 Portuguese plants acquired by exchange.

The British herbaria of Thomas Moore and Thomas Knowlton, and Rev. Kirby Trimmer's herbarium of British mints, received from the Director, Royal Gardens, Kew.

The herbarium of Dr. H. F. Hance, containing the types of the Chinese plants described by him : purchased.

Maze's marine algæ of Guadeloupe, 1,509 specimens : purchased.

642 plants from Malasia and Abyssinia collected by O. Beccari : purchased.

580 Central and South American plants collected by F. Lehmann : purchased ; in 1888, 806 plants were purchased ; in 1890, 1,975.

289 Galitzian plants collected by B. Blocki : purchased ; in 1888, 240 Polish plants were purchased ; in 1894, 96 Galitzian.

176 plants from Nyasa-land collected by W. Bellingham : purchased.

1888.

819 plants from the Eastern Archipelago, collected by T. Lobb and presented by H. J. Veitch, Esq. ; in 1894, 400 plants, chiefly ferns and pitcher-plants from Borneo, were purchased.

530 plants from Africa and Syria, collected and presented by Dr. Schweinfurth ; in 1890, 179 Arabian plants were acquired by exchange.

440 South African plants collected and presented by G. F. Scott Elliott, Esq. ; in 1889, 67 cryptogams from Madagascar ; in 1890, 118 plants ; in 1892, 456 North African plants and 246 from Sierra Leone ; in 1893, 1,158 from Sierra Leone ; in 1895, a collection from Ruwenzori.

305 plants, with 95 woods and 25 fruits, etc., from the Bahamas, collected by Baron Eggers and presented by a joint committee of the Royal Society and the British Association ; in 1900, 268 plants from St. Domingo were purchased.

245 European fungi, chiefly British, presented by W. W. Strickland, Esq.

161 Cyrenian plants collected and presented by W. Barbey, Esq.

145 plants from St. Thomas, West Africa, presented by Prof. Henriques.

68 British plants collected and presented by the Rev. E. S. Marshall ; in 1889, 254 plants were presented ; in 1890, 209 ; in 1891, 306 ; in 1892, 261 ; in 1893, 390 ; in 1895, 431 ; in 1896, 342 ; in 1898, 348 ; in 1899, 247 ; in 1900, 203 ; in 1901, 352 ; in 1902, 280.

807 South American plants collected by H. H. Rusby : purchased : in 1893, 29 cryptogams were purchased : in 1895, 251 plants ; in 1896, 377.

A collection of plants from Nyasa, made by John Buchanan : purchased : in 1893, 690 plants and 52 woods, etc. : purchased ; in 1896, 435 plants.

650 slides of Diatomaceæ, prepared by H. L. Smith, and 144 by Norman : purchased.

172 Brazilian plants, with specimens of fruits, woods, etc., collected by G. A. Ramage : purchased ; in 1889, 398 plants from

Dominica were presented by a joint committee of the Royal Society and the British Association; in 1890, 87.

Hough's sections of American woods: purchased; 1887-1902.

1,390 herbarium specimens and 690 microscope preparations of British algæ, prepared by T. H. Buffham: purchased at various dates between the years 1888-96.

33 fascicles of P. Sydow's "Uredineen," containing 1,650 specimens: purchased at various times since 1888.

1889.

A herbarium of 2,383 lichens, formed and presented by Horatio Piggot, Esq., including Dr. Deakin's collection; in 1890, 53 British fungi were presented.

455 Australian algæ collected and presented by G. Clifton, Esq., R.N.; the following year, 110 algæ were presented.

228 cryptogams presented by J. D. Llewellyn, Esq.

213 Malaysian plants collected and presented by H. N. Ridley, Esq.; in 1890, 629 plants were presented; in 1891, 758; in 1893, 4,096; in 1894, 1,877; in 1895, 14 fruits, etc.; in 1896, 841 plants and 345 woods; in 1898, 180 plants; in 1899, 79; in 1901, 70 plants and 86 woods, etc.

52 slides of Indian fungi, prepared and presented by Surg.-Major A. Barclay; in 1890, 30 slides were presented; in 1892, 505 slides and a large collection of herbarium specimens were purchased.

35 algæ from Madras collected and presented by E. Thurston, Esq.; in 1902, 102 marine phanerogams and algæ were presented.

A series of algæ from the Baltic, collected by Prof. Reinke, was acquired by exchange.

4,429 microscope preparations, chiefly of cryptogams, made by Prof. de Bary: purchased.

2,928 species, being the plants of Haussknecht's "Iter Græcum": purchased.

A collection of ferns from Assam, made by C. W. Hope: purchased.

A small collection of plants from Kina Balu, North Borneo, formed by J. Whitehead: purchased; in 1897, 152 plants from the Philippines were presented.

390 plants from Spain and Portugal, collected by Rev. R. P. Murray: purchased; in 1898, 400 plants from the Canary Islands were purchased; in 1900, 139 plants were presented.

208 Mexican plants collected by W. Schumann : purchased.

121 preparations of fossil plants from Sir J. D. Hooker : purchased.

100 plants from Stanley Falls, Congo, collected by F. Hens : purchased.

Briosi and Cavara's "I Funghi Parassiti" : purchased, 1888-1900.

1890.

The herbarium formed by Dr. R. McCormick, R.N., and containing plants collected during Parry's Arctic Expedition, 1827, Ross's Voyage of the *Erebus* and *Terror*, and the Expedition in search of Franklin : bequeathed.

3,137 microscope-slides of cryptogams, being the collection of John Ralfs, Esq. : presented by his son ; in 1892, his cryptogamic herbarium of 1,968 specimens : purchased.

The herbarium of G. M. Ferro : presented by the Director, Royal Gardens, Kew.

221 Cape algæ collected and presented by L. A. Boodle, Esq.

130 plants from the Andes collected and presented by E. Whymper, Esq.

452 plants from the Sandwich Islands collected by Hillebrand : acquired by exchange.

603 Bolivian plants collected by M. Bang : purchased ; in 1892, 510 plants were purchased ; in 1893, 452.

469 plants from Asia Minor collected by J. Bornmüller : purchased ; in 1891, 317 Anatolian plants were purchased ; in 1894, 315 ; in 1895, 208 Persian plants ; in 1896, 442 ; in 1897, 279.

Three fasciculi of Dahlstedt's "*Hieracia exsiccata*" : purchased ; the following year, fasc. 4 was purchased.

243 Malayan plants collected by C. Curtis : purchased ; in 1891, 200 were presented ; in 1894, 133.

194 plants from Honduras collected by Rev. J. Robertson : purchased.

155 cryptogams from Tonkin collected by Balansa : purchased.

113 plants from Natal collected by Mrs. C. S. Clarke : purchased.

1891.

420 plants from Gwalior collected and presented by C. Maries, Esq.

160 ferns from St. Vincent collected by H. H. and G. W. Smith: presented by a joint committee of the Royal Society and the British Association; in 1892, 190 plants were presented; in 1893, 295.

A collection of ferns from Grenada made by R. V. Sherring was presented by the same committee.

60 algæ, being the types of Bornet and Flahault's "Revision des Nostocacées": presented by Prof. Flahault.

23 Cape cryptogams collected and presented by W. Tyson, Esq.; in 1892, 69 cryptogams were presented; in 1893, 166; in 1894, 57; in 1895, 63; in 1896, 23.

The cryptogamic herbarium formed by H. W. Ravenel and consisting of 1,950 mosses and hepatics, 4,500 lichens, 1,100 algæ and 7,000 fungi: purchased.

Herbarium of 4,490 species of plants from New Granada, formed by José Triana: purchased.

2,706 West Chinese plants collected by Dr. A. Henry: purchased; in 1895, 384 Formosan plants were purchased.

1,350 North Chilian plants collected by August Borchers: purchased.

601 plants from Szechuen and the Tibetan frontier, collected by A. E. Pratt: purchased; in the following year, 170 plants were purchased.

1,700 species, forming thirty-four fasciculi of Krieger's "Fungi Saxonici": purchased from time to time since 1891.

300 British fungi collected by G. Masee: purchased.

201 plants from Madagascar collected by J. Cloisel: purchased.

189 plants from Paraguay collected by T. Morong: purchased; in 1892, 340 plants were purchased; in 1894, 79 plants and 3 fruits.

100 mosses, forming first century of Ule's "Bryotheca Brasiliensis": purchased; in 1895, cent. 2 was purchased; in 1899, 445 Brazilian cryptogams.

1892.

George Davies's herbarium of about 20,000 British and exotic cryptogams presented.

199 North American cryptogams presented by Prof. Farlow; in 1895, 59 lichens were presented.

234 characæ from Alex. Braun's herbarium were acquired by exchange.

100 Appalachian mosses collected by Austin: acquired by exchange.

565 specimens forming Wainio's "Lichenes Brasilienses exsiccati": purchased.

348 Dahurian plants collected by F. Karo: purchased.

590 specimens, forming eleven fasciculi of Seymour and Earle's "Economic Fungi," with supplement: purchased at intervals between the years 1892 and 1900.

150 preparations of "Champignons de France" by Tempère and Dutertre: purchased; the following year, 100 more were purchased.

250 specimens, forming five pugilli of Cavara's "Fungi Longobardiæ exsiccati": purchased between 1892 and 1896.

30 species, forming fasc. 1 of H. and J. Groves's "Characæ Britannicæ": purchased; in 1900, fasc. 2 was purchased.

Revs. E. F. and W. R. Linton's fascicles of "British Rubi": purchased 1892-97; similar sets of Willows and Hieracia were purchased between 1895 and 1901.

150 specimens of Migula, Sydow and Wahlstedt's "Characæ exsiccatae," 6 fascicles: purchased between 1892 and 1901.

1893.

The collection of Diatomacæ made by Mr. Julien Deby: purchased.

Edward Jenner's herbarium of algæ, containing over 6,000 specimens: purchased.

1,097 cellular plants collected by W. R. Elliott in Dominica and St. Vincent were presented by a joint committee of the Royal Society and the British Association.

A collection of plants from East Equatorial Africa made and presented by Dr. J. W. Gregory.

472 plants from Borneo, collected by G. Haviland; in 1894, 261; in 1895, 200; in 1896 (with C. Hose), 108.

220 plants from Milanji, Nyasa, collected by A. Whyte, Esq., and presented by Sir H. H. Johnston.

138 West Australian and 72 Corean plants, collected and presented by J. H. Veitch, Esq.

133 plants from Uruguay collected by O. V. Aplin, Esq.

99 South African plants collected by Rudolf Schlechter: acquired by exchange; in 1894, 101 plants were purchased; in 1895, 96; in 1897, 1,010; in 1898, 1,120; in 1899, 540; in 1901, 445.

299 West Australian plants collected by J. A. Brewer : purchased.

235 cryptogams from the Cameroons, collected by Dusén : purchased.

231 specimens, forming nine fasciculi of Husnot's "*Hepaticæ Galliæ*" : purchased in 1893 and 1901.

350 specimens Renauld and Cardot's "*Musci Americæ septentrionalis*" in 7 fascicles : purchased at intervals between 1893 and 1901.

699 mosses, 597 lichens and 166 fungi, from Labrador and Newfoundland, collected by Rev. A. C. Waghorne : purchased at various times, 1893-99.

1894.

Herbarium of 883 specimens of British fresh-water algæ, formed by Dr. A. H. Hassall : presented.

233 slides of Mycetoza prepared and presented by A. Lister, Esq. ; in 1895, 832 slides, 397 herbarium and 112 exhibition specimens were presented ; in 1898, 88 specimens and 28 slides ; in 1901, 22 specimens and 5 slides.

173 plants from Hadramaut, Arabia, collected by W. Lunt : presented.

94 plants from Kolguev Island, collected and presented by A. Trevor Battye, Esq.

110 African plants collected by C. Holst : acquired by exchange with the Royal Botanic Museum, Berlin ; the following from various collectors were similarly acquired : 298 Tropical African plants, 46 Japanese and 292 cellular cryptogams ; in 1895, 442 Tropical African plants ; in 1896, 928 plants from the Cameroons and Argentine Republic ; in 1897, 384 cryptogams from Asia, Africa and South America ; in 1900, 916 plants.

108 slides of British *Hepaticæ*, prepared by Mrs. Tindall : acquired by exchange ; the following year, 159 slides were acquired.

1,100 specimens of plants from Matto Grosso, Brazil, collected by S. Moore : purchased.

500 specimens of Eriksson's "*Fungi parasitici Scandinavici*" : purchased.

161 Oriental plants collected by J. Wagner : purchased.

125 Bulgarian plants collected by Střibný : purchased ; in 1895, 118 plants were purchased ; in 1899, 68 ; in 1902, 240.

300 specimens, forming 6 fascicles of P. Sydow's "*Ustilagineæ*" : purchased at various dates since 1894.

1895.

246 East Tropical African plants collected and presented by Dr. Donaldson Smith ; in 1900, 210 plants were presented.

213 East African plants collected and presented by F. J. Jackson, Esq.

Prof. D. H. Campbell presented 146 microscope-slides, illustrating his researches on archegoniate plants.

108 British plants collected and presented by W. A. Shoolbred, Esq. ; in 1898, 96 plants were presented.

The first portion, consisting of 5,000 specimens of the Stephani collection of Hepaticæ: purchased ; in the following year, the concluding portion, consisting of 6,920 specimens, was purchased.

1,233 plants and 68 woods from Kilimanjaro collected by W. Volkens : purchased.

400 species, forming first four centuries of Rehmann and Woloszczak's "Flora Polonica exsiccata" : purchased ; centuries 5-9 were acquired later.

348 plants from South Texas and 297 from the Sandwich Islands collected by A. A. Heller : purchased ; in 1896, 249 plants from Hawaii were purchased ; in 1897, 277 from New Mexico.

300 plants from Coolgardie, West Australia, collected by S. Moore : purchased.

1,075 specimens, forming twenty-three fasciculi of Collins, Holden, and Setchell's "Phycotheca Boreali-Americana," with supplements : purchased at various dates between 1895 and the present time.

350 specimens, forming seven fasciculi of Jaczewski, Komarov and Tranzschel's "Fungi Rossicæ exsiccati" : purchased between the years 1895 and 1900.

100 species, forming first two fasciculi of Tiselius' "Potamogetones Suecici" : purchased ; in 1897, fasc. 3 was purchased.

31 species, forming fasc. 1 of Arthur and Holway's "Uredineæ exsiccatae" : purchased ; in 1899, fasc. 2 (55 sp.) was purchased ; in 1901, fasc. 3 (28 sp.).

1896.

3,705 specimens of fungi and lichens from Weddell's herbarium were presented by the Linnean Society.

Collection of Diatomaceæ, containing 3,582 slides : bequeathed by F. C. S. Roper, Esq.

300 plants from British North Borneo collected and presented by Governor Creagh ; the following year, 162 plants were presented.

25 plants from Kolguev collected and presented by Col. H. W. Feilden ; in 1898, 302 plants from Novaya Zemlya were presented ; in 1902, 45 Cape plants.

597 plants from Minnesota collected by Conway Macmillan : acquired by exchange.

1,334 plants from Sequoia Region, California, collected by G. Hansen : purchased ; in 1899, 392 plants were purchased.

The Bracebridge Wilson collection of Victorian algæ, containing 1,485 specimens and 140 slides : purchased.

Seventeen centuries of Ellis and Everhart's "Fungi Columbiani," ed. 2 : purchased at intervals since 1896.

588 Chinese plants and 30 fruits collected by Father Hugh : purchased ; in 1898, 970 plants were purchased ; in 1899, 844 ; in 1900, 735 ; in 1901, 1,045.

529 plants from Madagascar collected by Dr. C. J. Forsyth-Major : purchased.

276 plants from French Congo and Gaboon, collected by G. L. Bates : purchased ; the following year, 100 plants were purchased.

200 "Schweizerische Kryptogamen" from Wartmann and Winter : purchased.

360 specimens, forming nine fasciculi of Johnson's "North of England Lichen-Herbarium" : purchased between the years 1896 and 1900.

Two centuries of Romell's "Fungi exsiccati praesertim Scandinavici" : purchased.

163 species, being Fiedler's "Beitrage zur Mecklenburgischen Piezflora" : purchased.

100 plants from Lombok collected by A. H. Everett : purchased.

. 1897.

433 plants from Somaliland collected and presented by Mrs. Lort Phillips.

133 Australian plants, mostly types of species described by the donor—F. M. Bailey, Esq.

100 Tasmanian mosses collected and presented by W. A. Weymouth, Esq.

92 Scottish fungi collected and presented by D. A. Boyd, Esq. ; in 1899 and 1900, 20 micro-fungi were presented.

Collections of Phytoplankton from the Atlantic presented by Capts. Rudge and Milner, whose collection was subsequently augmented.

99 Brazilian plants collected by F. Sellow: acquired by exchange.

1,180 plants from Costa Rica collected by Durand and Pittier: purchased.

700 plants from Asia Minor collected by W. Siehe: purchased; in 1899, 142 plants were purchased.

545 dried orchids and sketches by John Weathers: purchased.

466 plants and 40 woods from the Cameroons collected by G. Zenker: purchased; in 1898, 362 plants were purchased; in 1899, 340; in 1901, 207 plants and 55 woods; in 1902, 288 plants.

275 "Musci Galliae," prepared by Husnot: purchased.

320 species, forming thirty-two decades of Cummings, Williams and Seymour's "North American Lichens": purchased, 1897-99.

Six centuries of American algæ, prepared by Miss Tilden; purchased in 1897, and at subsequent dates.

172 specimens, being Eaton and Faxon's "Sphagna Boreali-Americana": purchased.

Howie's "Musci Fifenses" (112 species): purchased.

100 specimens of Koehne's "Herbarium Dendrologicum": purchased; in 1900, 135 specimens were purchased.

Two centuries of Fleischer and Warnstorff's "Bryotheca Europæa meridionalis": purchased, 1897, 1898.

200 specimens, forming four fascicles of P. Sydow's "Phycomyceten and Protomyceten": purchased in 1897 and 1902.

100 Shropshire mosses collected by R. de G. Benson, Esq.: purchased; in 1898, 157 were purchased.

1898.

627 Cape plants collected and presented by Major A. H. Wolley Dod; the following year, 1,239 plants were presented.

591 Rhodesian plants collected and presented by Dr. F. Rand; in 1902, 280 plants from the Transvaal were presented.

578 mosses and hepatics from Charles Lyell's herbarium: presented by Mrs. K. Lyell; the following year, 1,120 specimens, including Lyell's reference set, were presented by Sir L. Lyell, Bart.

346 plants and 14 fruits from Christmas Island, collected by C. W. Andrews and presented by Sir John Murray.

192 West African plants collected and presented by J. W. H. Migeod, Esq.

169 plants from Sivas, Asia Minor, collected and presented by F. R. Maunsell, Esq. ; in 1901, 180 plants from Van, Armenia, were presented.

92 Siamese plants collected by Dr. Haase and presented by S. S. Flower, Esq.

70 Tibetan plants collected and presented by A. H. Savagelandor, Esq. ; in 1902, 34 plants from North Beluchistan were presented.

Collections of Phytoplankton, from the Atlantic, presented by Capt. C. S. Tindall ; from the Indian Ocean, presented by Capt. Cowie ; and from the Indian Ocean and China Sea, presented by Capt. Leigh ; with a large collection of organisms from the surface and the intermediate depths of the North Atlantic, made by Messrs. Murray and Blackman.

146 North American plants collected by G. R. Vasey were acquired by exchange with J. N. Rose, National Herbarium, Washington, U.S.A.

The herbarium of Emile Bescherelle, containing 18,300 mosses and hepatics, and many types : purchased.

1,600 South African plants collected by F. Wilms : purchased ; in 1900, 473 plants were purchased.

494 North African plants collected by Sven Murbeck : purchased.

Twelve centuries of D. Saccardo's "*Mycotheca Italica*" : purchased, 1898-1902.

203 Floridan plants collected by G. N. Collins : purchased.

113 East Indian hepatics collected by Schiffner : purchased.

109 North American cryptogams collected by Small : purchased.

108 plants from New Guinea collected by C. Lauterbach : purchased.

Bauer's "*Bryotheca Bohemica*," three centuries : purchased 1898-1902.

81 mosses from Tahiti collected by Nadeaud : purchased.

70 slides of British fresh-water algæ prepared by W. West, Jun. : purchased ; in 1899, 504 were purchased ; in 1900, 314.

1899.

321 plants from Tropical Africa collected and presented by Lord Delamere.

227 plants from Chinese Turkestan collected and presented by Capt. H. H. P. Deasy.

188 Arabian plants collected and presented by Dr. A. S. G. Jayakar.

162 plants from the West Indies, collected by Dr. Gregory and presented by a joint committee of the Royal Society and the British Association.

154 Samoan cryptogams collected by the Rev. T. Powell: presented.

153 microscope-preparations of diatoms from St. Vincent, West Indies, presented by E. Grove, Esq.

Collections of Phytoplankton, from South Atlantic, presented by Capt. A. Turbyne; from North Atlantic and Arctic Oceans, presented by W. L. Browne, Esq.; and from the Red Sea, Indian Ocean, North Pacific, etc., presented by Capt. G. K. Wright, R.N.R.

Eight centuries of "Kryptogamæ Exsiccatae" of the Vienna Hofmuseum: acquired by exchange, between the years 1899 and 1902.

120 Himalayan mosses collected by Mrs. Bradford were acquired by exchange; in 1901, 108 Indian cryptogams were acquired.

109 lichens collected during the Hassler Expedition, and 106 during the U.S. Exploring Expedition: acquired by exchange.

7,703 slides of marine algæ, mostly Florideæ, prepared by Prof. Schmitz: purchased.

Herbarium of 3,121 British mosses, formed by Rev. H. G. Jameson: purchased.

648 plants from Colorado collected by Baker, Earle, and Tracey: purchased; in 1900, 725 plants were purchased.

500 species, being Linhart's "Fungi Hungarici": purchased.

338 plants from Sarawak collected by E. Bartlett: purchased.

250 plants from Costa Rica collected by A. Tonduz: purchased; in 1900, 519 plants were purchased; in 1902, 109.

625 specimens, forming twenty-five fasciculi of Vestergren's "Micromycetes Selecti": purchased in 1899 and subsequently.

219 plants from the Cascade Mountains, Washington, collected by O. D. Allen : purchased.

200 "Micro-Fungi Britannici," by Vize : purchased.

Reichenbach and Schubert's "Lichenes exsiccati" (125 specimens): purchased.

Krieger's "Schädlicher Pilze unserer Kultur-gewächse" (100 specimens): purchased.

Nine fascicles of Kneucker's "Carices exsiccatae": purchased, 1899-1901.

Delogne and Gravet's "Hepatiques de l'Ardenne" (60 specimens): purchased.

250 specimens of Fleischer's "Musci Archipelagi Indici": purchased 1899-1902.

1900.

670 Guatemalan plants collected and presented by Capt. J. Donnell Smith.

163 Hepaticæ from West Scotland collected and presented by Symers M. Macvicar, Esq.

149 plants from Klondike collected and presented by J. B. Tyrrell, Esq.

134 Chinese plants collected and presented by W. H. Shockley, Esq.; the following year, 179 Siberian plants were presented.

223 North African plants collected by Cosson: acquired by exchange.

179 plants, chiefly Australian, acquired by exchange with the Botanic Gardens, Sydney; the following year, 192 plants were acquired.

114 plants, chiefly South African, acquired by exchange; in 1902, 143 plants were acquired.

The Fern Herbarium of 2,000 specimens, formed by Sir Rawson W. Rawson, was purchased.

Ellis and Everhart's "North American Fungi" (3,600 specimens): purchased.

831 plants from Baram District, Borneo, collected by C. Hose: purchased; in 1902, 800 plants from Borneo and North Celebes were purchased.

250 Irish Hepaticæ collected by D. McArdle: purchased.

Warnstorff's "Europäische Torfmoose" (238 species): purchased.

143 South American hepatics collected by Dusén: purchased; in 1902, 325 mosses were purchased.

Kneucker's Cyperaceæ and Juncaceæ (120 species), and Gramineæ (300 species): purchased, 1900-1902.

1901.

171 South African plants presented by Dr. S. Schönland ; the following year, 60 plants were presented.

153 plants from Buenos Ayres collected and presented by Ernest Gibson, Esq.

104 plants collected by Capt. Parry during his three voyages : presented by Lord Walsingham.

1,059 Gulf Coast plants collected by S. M. Tracy : purchased ; the following year, 454 plants were purchased.

822 Georgian plants collected by R. Harper : purchased ; the following year, 365 plants were purchased.

805 plants from Kunene-Zambesi collected by H. Baum : purchased.

471 West Australian plants collected by E. Pritzel : purchased ; the following year, 544 plants were purchased.

428 Mexican plants collected by E. O. Wooton : purchased.

237 plants from New Mexico, collected by F. S. and E. Earle : purchased.

180 Siamese plants collected by Zimmerman : purchased.

176 Brazilian cryptogams collected by A. Robert : purchased.

161 specimens of Equisetum from Wirtgen's "Pteridophyte exsiccata" : purchased.

1902.

Mr. Thos. Comber's collection of diatoms, consisting of 2,926 microscope-slides, and a large number of photographic negatives, and prints : presented by his widow.

413 South African plants collected and presented by Capt. Barrett-Hamilton.

130 Patagonian plants collected and presented by H. Hesketh Prichard, Esq.

94 plants from Johannesburg collected and presented by H. T. Ommanney, Esq.

W. H. Pearson's Herbarium of Hepaticæ, containing 9,000 specimens : purchased.

1,029 Tropical African plants collected by T. Kässner : purchased.

395 "Plantæ Americæ" collected by F. Karo : purchased.

270 West Australian plants collected by L. Webster : purchased.

266 plants from Margarita Island, Venezuela, collected by O. O. Miller : purchased.

218 European cereals prepared by J. Percival: purchased.

200 species of Paulin's "Flora exsiccata Carniolica": purchased.

143 plants from German East Africa collected by W. Busse: purchased.

105 plants from Vermont collected by W. W. Eggleston: purchased.

100 plants from Vancouver Island collected by C. O. Rosendahl and C. J. Brand: purchased.

3.—ALPHABETICAL LIST OF THE MORE IMPORTANT CONTRIBUTORS
TO THE COLLECTION OF PLANTS IN THE DEPARTMENT OF
BOTANY.*

Abel (CLARKE). [1780–1826]

Chinese plants in Herb. Banks, “the only part of his herbarium that escaped the wreck of the *Alceste*,” including types of the new species described by Brown in the “Narrative” of Abel’s journey into the interior of China.

Adair (PATRICK). [*f.* 1696]

Plants from the Cape and Johanna Island in Herb. Sloane.

Afzelius (ADAM). [1750–1837]

Plants from Sierra Leone in Herb. Banks, and mosses in Herb. Hampe.

Ahlberg (A.).

1625 species of Scandinavian plants, purchased 1871.

Aitchison (JAMES EDWARD TIERNEY). [1836–98]

422 species collected in the Kurram Valley, Afghanistan, 1879, presented 1880; 196 species collected in Afghanistan, 1880, presented 1881; set of plants collected in Afghan Boundary Expedition, 1884–85, presented 1887.

Aiton (WILLIAM) [1731–93] and his son WILLIAM TOWNSEND
Aiton [1766–1849]

Were successively Directors of the Royal Gardens, Kew (1759–1841). In that capacity they sent to Banks, or to his librarians, Solander and Dryander, the novelties grown in the Gardens; these were described by the two last-named. The novelties were published in the “*Hortus Kewensis*” (ed. i, 1789; ed. ii, 1810), and the types of these are in the Banksian Herbarium; the original MS. descriptions are also preserved in the Department. The younger Aiton also presented in 1839 a collection of plants formed during the voyage of H.M.S. *Sulphur* to S. America.

Alexander (WILLIAM THOMAS). [1818–72]

Mosses of Chusan, etc. (1845–46), acquired with Herb. Wilson.

Allen (O. D.).

219 plants from the Cascade Mountains, Washington, purchased 1899.

* Only collections amounting to a hundred or more specimens are included in this list, except in the case of smaller collections of special interest.

Anderson (ALEXANDER). [*d.* 1811]

Plants from Demerara (1791) from N. America, and from the St. Vincent Garden (1785-86), of which he was curator, in Herb. Banks.

Anderson (JOHN). [*d.* 1847]

Plants from Chiloe (1829-30) with MS. list.

Anderson (WILLIAM). [*d.* 1778]

Plants collected during Cook's second and third voyages to Australia, New Caledonia, the Pacific Islands, &c., in Herb. Banks.

Andersson (NILS JOHAN). [1821-80]

Mosses collected in South America, Oceania, &c., during the voyage of the *Eugénie* (1851-53), acquired with Herb. Hampe.

Andrews (CHARLES WILLIAM). [1866-]

278 plants collected on Christmas Island, presented by Sir John Murray, including types of the novelties described in the monograph on the island.

Andrews (JOSEPH). [*f.* 1710-57]

His herbarium of British plants, presented by Miss Hemsted.

Anzi (MARTINO). [1812-83]

"Lichenes exsiccati Italiae (ex herb. Massalongo)", 360 specimens in 10 fascicles (1855-56); "Lichenes rariores Langobardi," 578 specimens in 14 fascicles (1861-73); "Lichenes Etruriae rariores," 53 specimens (1863); "Cladoniae cisalpinae," 85 forms (1863); "Lichenes rariores Veneti (ex herb. Massalongo)", 175 specimens in 4 fascicles (1863); "Lichenes exsiccati minus rari Italiae superioris," 400 specimens in 8 fascicles (1865). These were purchased 1871-75.

Aplin (OLIVER VERNON).

133 plants from Uruguay, acquired 1893.

Appun (CARL FERDINAND).

131 plants from Demerara, purchased 1872.

Areschoug (JOHAN ERHARD). [1811-87]

"Algæ Scandinavicae," 84 specimens in 3 fascicles (1840, 41); also Series II, 400 specimens in 8 fascicles (1861-72), purchased 1872-75.

Arnold (FERDINAND CHRISTIAN GUSTAV). [1828-1901]

Lichens from the Tyrol and Bavaria, purchased at various dates from 1874.

Arnott (GEORGE ARNOLD WALKER). [1799-1868]

Mosses from his herbarium, purchased as part of Wilson's herbarium in 1873; 600 microscope-preparations, purchased with the Deby diatoms in 1893.

Arthur (JOSEPH CHARLES) and EDWARD W. D. Holway.

"Uredineæ exsiccatæ" of North America, 114 specimens in 3 fascicles, purchased 1895-1901.

Atkins (ANNA, Mrs.). [*d.* 1871]

Herbarium of British plants, presented 1865.

Aublet (JEAN BAPTISTE CHRISTOPHORE FUSÉE). [1773-78]

An extensive collection of Guiana plants, including numerous types for his "Histoire des plantes de la Guiane Française," in Herb. Banks.

Aucher-Eloy (PIERRE MARTIN RÉMI). [1792-1838]

1907 plants chiefly from Syria, Persia, and Arabia, purchased 1841; subsequently supplemented by additions from the Shuttleworth collection.

Auerswald (BERNHARD). [1818-70]

Herbarium of 17,000 specimens, chiefly from Central Europe, Spain, the Ural territory, Mexico, and Labrador, purchased 1871.

Auge (ANDREAS). [*fl.* 1820]

Numerous plants from the Cape in Herb. Banks.

Ayres (PHILIP BURNARD). [*d.* 1863]

"Mycologia Britannica," 100 specimens in 2 fascicles (1845), purchased 1861.

Back (Sir GEORGE) [1796-1878] and **RICHARD King**.

170 North American plants, collected, 1833-35, during the expedition to the Hudson Bay territory in search of Captain Ross, presented 1836.

Backhouse (JAMES). [1825-90]

Set of British Hieracia, purchased 1863.

Baenitz (CARL GABRIEL).

165 Graminæ and 175 Juncaceæ, purchased 1870.

Bagnall (JAMES EUSTACE).

89 Warwickshire Rubi, presented 1881, and 20 Staffordshire mosses, presented 1895.

Bailey (CHARLES). [1838-]

605 British plants, presented 1882-84.

Bailey (FREDERICK MANSON).

141 Australian plants, mostly types of species described by him, presented 1897-99.

Bailey (LIBERTY HYDE). [1858-]

78 Carices from North America, obtained by exchange, 1897.

Baker (CARL F.), **Earle**, F. S., and **S. M. Tracy**.

1373 plants of Colorado, purchased 1899-1900.

Baker (JOHN GILBERT). [1834-]

110 British plants, presented, 1887-88.

Balansa (B.). [*d.* 1892]

1,226 plants from Asia Minor, etc., purchased, 1855-58. 315 phanogams and 593 cryptogams from Paraguay, purchased, 1885.

Balbis (GIOVANNI BATTISTA). [1765-1831]

Plants in Herb. Roemer, acquired with Herb. Shuttleworth.

Balfour (ISAAC BAYLEY). [1853-]

Collections (phanerogams and cryptogams) made in Rodriguez during the Transit of Venus expedition, presented by the Royal Society, 1876-78. 373 plants collected in Socotra, 1880.

Ball (JOHN). [1818-89]

313 plants from Morocco, presented 1885.

Bang (MIGUEL).

1,565 Bolivian plants, purchased 1890-93.

Banister (JOHN). [*d.* 1692 or 1696?]

Two volumes of specimens in the Sloane Herbarium (vols. 91, 92).

Banks (*Sir* JOSEPH). [1743-1820]

See introductory note.

Barbey (WILLIAM). [1842-]

161 Cyrenian plants, presented 1888.

Barclay (ARTHUR). [1852-91]

His collection of 505 microscope-preparations and numerous specimens of Uredineæ and other micro-fungi illustrating his memoirs, purchased 1892.

Barclay (GEORGE).

Collections made during the voyage of H.M.S. *Sulphur*, 1836-41 in New Guinea, Peru, Mexico, Brazil, etc., presented by W. T. Aiton, 1839, and by the Lords of the Admiralty, 1896.

Barham (HENRY). [*d.* 1726]

West Indian plants in Herb. Sloane.

Baron (RICHARD). [1847-]

1,457 plants from Madagascar, purchased 1883-92.

Barrett-Hamilton (*Lieut.* GERALD EDWIN HAMILTON).

413 plants from South Africa, presented 1902.

Bartlett (EDWARD).

338 plants from Borneo, purchased 1899.

Bartling (FRIEDRICH GOTTLIEB) [1798-1875] and GEORG ERNST LUDWIG Hampe.

A set of their cryptogams, chiefly from the Harz Mountains, acquired with Herb. Shuttleworth in 1877.

Bartram (JOHN). [1699-1777]

A large number of specimens from Georgia and Carolina (1765-66) in the Banksian Herbarium, which also contains a few from Carolina from

his son, WILLIAM BARTRAM (1739-1823): specimens in the Sloane Herbarium (vols. 332, 334).

Bates (G. L.).

376 plants from French Congo and Gaboon, purchased 1896-97.

Batters (EDWARD ARTHUR LIONEL).

40 specimens and 35 microscope-preparations of British marine algae, presented 1890-92.

Baxter (WILLIAM). [*fl.* 1830]

South Australian plants acquired with Herb. Brown.

Baudin (NICOLAS). [1750-1803]

Specimens from Australia in Herb. Banks.

Bauer (ERNST).

"Bryotheca Bohemica," 300 specimens, purchased 1898-1902.

Baum (H.).

805 plants from Kunene-Zambesi, purchased 1901.

Baxter (WILLIAM). [1787-1871]

"Stirpes cryptogamicæ Oxonienses," 100 specimens in 2 fascicles (1825-28), purchased 1862, 1873.

Beaufort (*Duchess of*).

See SOMERSET.

Beccari (ODOARDO). [1843-]

642 plants from Abyssinia and Malasia, purchased 1887.

Becker (ALEXANDER). [1818-1901]

Set of plants from Sarepta, purchased.

Beddome (*Lieut.-Col.* RICHARD HENRY). [1830-]

Herbarium of Indian plants, containing about 10,000 species, collection of Indian ferns, among them many types of his "Ferns of British India" and of his other works, purchased.

Beeby (WILLIAM HADDON). [1849-]

193 British plants, presented at intervals since 1884.

Bell (WILLIAM M.).

211 species collected in the Survey for the Pacific Railroad between Fort Wallace, Kansas, and Santa Fé, presented 1869.

Bell ().

Plants collected at the Cape in 1727, in Herb. Sloane.

Bellingham (WILLIAM).

176 plants from Nyasa-land, purchased 1887.

Bennett (ARTHUR). [1844-]

A large number of plants of various countries, especially European and British, presented at frequent intervals since 1881.

Bennett (GEORGE). [1804-93]

Specimens of Australian plants, presented at intervals from 1859.

Benson (RICHARD DE GYLPYN). [1856-1904]

257 Shropshire mosses, purchased 1897, 1898.

Berggren (SVEN). [1837-]

Collection from New Zealand (240 phanerogams and 75 algæ), purchased 1879.

Berkeley (MILES JOSEPH). [1803-89]

His "British Fungi," 350 specimens in 4 fascicles (1836-43), purchased 1872; numerous authentic specimens acquired with Herb. Broome.

Berlandier (JEAN LOUIS). [*d.* 1851]

1300 species of plants from Texas and Mexico, purchased 1838.

Bertero (CARLO GIUSEPPE). [1789-1831]

500 plants from Chili, purchased 1834.

Bertoloni (ANTONIO). [1775-1869]

Plants in Herb. Roemer, acquired with Herb. Shuttleworth.

Bescherelle (ÉMILE). [1828-1903]

His exotic mosses, about 14,800 specimens, containing the plants described in his memoirs on the mosses of the French Colonies, etc., and authentic specimens from the older French botanists; also his European and exotic hepatics, about 3,500 specimens, purchased in 1900.

Beyrich (KARL). [*d.* 1834]

Phanerogams from Georgia and Carolina. Brazilian mosses in Herb. Hampe.

Billot (PAUL CONSTANT). [1796-1863]

His "Flora exsiccata," a collection chiefly of French and German critical plants, published at intervals from 1846, and purchased.

Bisset (JAMES).

Extensive collections of Japanese plants (phanerogams and cryptogams), presented 1882 and 1889.

Black (ALLAN OSMOND). [*d.* 1864?]

His herbarium of mosses containing 2,000 specimens, chiefly British, purchased 1864.

Bladh (PEHR JOHANN).

Sent plants to Banks from Macao and Canton.

Blake (JOHN BRADBY). [1745-73]

Chinese plants in Herb. Banks.

Blanchet (JAQUES SAMUEL). [1807-75]

315 Brazilian plants and 250 woods from Brazil, purchased 1836-38.

Blanco (ANTONIO).

396 plants from the province of Jaen, Spain, purchased 1850.

Blandow (OTTO CHRISTIAN). [1778-1810]

"Musci frondosi," 250 specimens in 5 fascicles, purchased 1875.

Blinkworth (RICHARD). [*Jl.* 1830]

A large collection of plants from Kumaon, presented.

Blocki (BRONISLAUS).

625 plants from Galicia and Poland, purchased 1887-94.

Bloxam (ANDREW). [1801-78]

His herbarium of fungi, containing 1,500 British specimens, 500 from North and South America, and 586 collected in the south of France by Nylander and by Roussel, was purchased in 1870. Collections of his lichens, mosses and Rubi were acquired at various dates from 1861 to 1896.

Blytt (AXEL). [1844?-98]

Norwegian plants.

Boerhaave (HERMANN). [1668-1738]

His herbarium, consisting largely of plants from the Leyden Garden, forms part of Herb. Sloane.

Bohler (JOHN). [1796-1872]

"Lichenes Britannici," 112 specimens in 8 fascicles (1835-37), purchased 1862.

Boissier (PIERRE EDMOND). [1810-85]

Spanish plants acquired with Herb. Shuttleworth.

Boivin (LOUIS HYACINTHE). [1808-52]

176 Mascarene plants, purchased 1861; mosses acquired with Herb. Bescherelle.

Bojer (WENZEL). [1800-56]

303 Mascarene plants presented by the Society of Arts and Sciences of Mauritius, 1847.

See also HILSENBERG.

Bolander (HENRY N.).

500 Californian plants, purchased 1868.

Bolus (HARRY). [1834-]

1100 South African plants, presented 1881-96.

See also MACOWAN and BOLUS.

Boodle (LEONARD ALFRED). [1865-]

221 marine algae from the Cape of Good Hope, presented 1890.

Borchers (AUGUST).

1350 plants from Chili, purchased 1891.

Bornmüller (JOSEF).

1,083 plants from Asia Minor and 929 from Persia, purchased 1890-97.

Botanical Record Club.

Herbarium of British plants transferred from the Herbarium of the Royal Gardens, Kew, 1884, and later portions, presented by F. A. Lees, Esq.

Botteri (MATTEO).

1,016 Mexican plants, purchased 1855-57; 516 Dalmatian plants, purchased 1854, 1867.

Bourgeau (EUGÈNE). [1813-77]

1,007 plants of the Canary Islands, purchased 1846; 4,113 plants from the Mediterranean region, purchased at various dates.

Bowdich (THOMAS EDWARD). [1790-1824]

A few plants collected during his mission to Ashantee, 1819.

Bowen (*Lieut.*).

119 species of Labrador plants, presented 1836.

Bowie (JAMES). [*d.* 1869]

Collection made with Allan Cunningham in Brazil (1814-17), in Herb. Banks; large collection of plants collected at the Cape 1817-23, presented by W. T. Aiton.

Bowker (JAMES HENRY). [*fl.* 1853-85]

150 plants from the Cape, purchased 1853.

Bowles (EDWARD AUGUSTUS).

Cultivated specimens of Crocus, etc., presented 1901-3.

Boyd (D. A.).

112 micro-fungi of Ayrshire, presented 1897-1900.

Bradford (MARY, *Mrs.*).

228 cryptogams from India, acquired in 1899 and 1901.

Braithwaite (ROBERT). [1824-]

"Sphagnacæ Britannicæ," purchased 1877.

Brass (WILLIAM). [*fl.* 1790]

Plants from West Coast of Africa in Herb. Banks.

Braun (ALEXANDER). [1805-77]

Cryptogams acquired with the herbaria of Shuttleworth and Hampe.
See RABENHORST.

Brebner (GEORGE).

82 microscope-preparations and 28 specimens of British marine algae, acquired at various times, 1885-1897.

Bretschneider (EMIL). [*d.* 1901]

228 Chinese plants collected by him and presented by F. B. Forbes, Esq.

Breutel (JOHANN CHRISTIAN).

322 Muscineæ from S. Africa, purchased 1867-71; 380 from Central America and 305 from Greenland and Labrador, purchased 1871.

Brewer (JAMES ALEXANDER). [*fl.* 1838-90]

354 plants from Western Australia, acquired 1893.

Breyne (JOHANN PHILIPP). [1680-1764]

Plants from Dantzic in Herb. Sloane.

Bridges (THOMAS). [1807-65]

533 plants from Bolivia, purchased 1847, and 285 from California, purchased 1858.

Briggs (THOMAS RICHARD ARCHER). [1836-91]

1602 British plants, chiefly from Devon and Cornwall, presented 1880-91.

British Herbarium.

For the convenience of British botanists the British plants have, since 1859, been separated from the General Herbarium—an arrangement adopted since 1859, when the herbaria of Edward Forster, James Sowerby, and Mrs. Robinson were combined as the nucleus of the British collection.

Briosi (GIOVANNI) [1846-] and **FRIDIANO Cavara** [1857-]

"Funghi parassiti delle Piante," 350 specimens in 14 fascicles (1888-1900), purchased 1889-1900.

Britton (NATHANIEL LORD). [1858-]

111 plants from North America, acquired by exchange, 1892.

Broome (CHRISTOPHER EDMUND). [1812-86]

His herbarium of fungi, containing about 40,000 specimens, many of them being the types of species described by him and by Berkeley, and 8 vols. of his correspondence, bequeathed 1886. In this collection were included sets of specimens published by Cooke, Phillips, Plowright, Vize, Fuckel, Rabenhorst, Ravenel, Rehm, von Thuemen, Wagner.

Brotherus (A.).

830 plants from the Caucasus, purchased 1883.

Brown (ROBERT). [1773-1858]

See p. 84.

Browne (SAMUEL). [*d.* before 1703]

A folio volume of plants (with notes) sent by him from Fort St. George (Madras) to the East India Company in 1697, and presented by the Company to the Royal Society; an account of the collection, by Petiver, is in *Phil. Trans.* Other specimens from Browne are in the Sloane Herbarium.

Bruce (ARTHUR). [1725?-1805]

Herbarium of British plants, purchased at the Linnean Society's sale, 1863.

Bruhns (ALEXANDER).

185 plants from island of Sviatoi, Caspian Sea, purchased 1871.

Brunner (SAMUEL). [1790-1844]

Plants from Senegambia and Johanna Island, acquired with Herb. Shuttleworth.

Buchanan (FRANCIS) afterwards **Hamilton**. [1762-1829]

Collection of *Avan* plants sent to Banks 1794, with MS. descriptions and drawings: see *Journ. Bot.*, 1902, 279; collection from Chittagong sent to Banks, 1798; 674 plants from Nepal, Mysore, and Malabar,

purchased at Lambert's sale, 1842, including the types of D. Don's "Flora Nepalensis."

Buchanan (JOHN). [1855-96]

1125 plants from Nyasa-land, presented 1893-96.

Buckley (SAMUEL BOTSFORD). [1809-84]

375 species of Alabama plants, purchased 1861.

Buddle (ADAM). [*d.* 1715]

Herbarium of British plants in Herb. Sloane, vols. 114-130: MS. relating to these in Sloane MSS. 2970-80.

Buffham (THOMAS HUGHES). [1840-96]

1390 specimens and 690 microscope-preparations of British algae, purchased at various dates, 1888-96.

Bunbury (Sir CHARLES JAMES FOX). [1809-86]

Plants from South Africa.

Burbidge (FREDERICK WILLIAM). [1847-]

230 plants from North Borneo, presented by Messrs. Veitch, 1879.

Burke (JOSEPH). [*f.* 1839-46]

380 species of South African plants, presented in 1843 by the Earl of Derby, who employed Burke as a collector.

Busse (WALTER).

143 plants from German East Africa, purchased 1902.

Caley (GEORGE). [*d.* 1829]

Large collections from Australia and the West Indies.

Campbell (CHARLES WILLIAM, *C.M.G.*).

80 phanerogams from Eastern Mongolia, presented 1901.

Campbell (DOUGLAS HOUGHTON). [1859-]

150 microscope-preparations illustrating his memoirs on the structure and development of mosses and ferns, presented 1895, 1896.

Campbell (W.).

294 plants from Formosa, presented 1876.

Carmichael (DUGALD). [1772-1827]

Mauritius and Bourbon plants, with MS. catalogue.

Carrington (BENJAMIN). [1827-93]

Hepatics and mosses acquired with the herbaria of Wilson and Pearson.

Carrington (BENJAMIN) and WILLIAM HENRY Pearson.

[1849-]

"Hepaticæ Britannicæ," 290 specimens in 4 fascicles (1878-90), purchased 1883 and after.

Carroll (ISAAC). [1828-80]

His "Lichenes Hibernici," 1 fascicle of 40 specimens, purchased 1859. 3,968 Irish and Scandinavian lichens, and numerous phanerogams

and cryptogams collected in Ireland, Lapland and Iceland, purchased 1874, 1875.

Carruthers (WILLIAM). [1830-]

470 species of plants from the United States and Mexico, collected and presented, 1884.

Caruel (TEODORO). [1830-98]

100 specimens of Junci, purchased 1887.

Catesby (MARK). [1679 or 1680-1749]

Two volumes of specimens in the Sloane Herbarium (212, 232).

Cavanilles (ANTONIO JOSÉ). [1744-1804]

Sent plants to Banks, which are in his herbarium; a small collection was purchased at Lambert's sale, 1842.

Cavara (FRIDIANO). [1857-]

"Fungi Longobardiæ," 250 specimens in 5 fascicles (1892-96), purchased.

See also BRIOSI.

Cesati (VINCENZO) [1806-83] and **T. Caruel**.

"Plantæ Italiæ borealis."

"**Challenger**" **Expedition**. [1873-76]

A set of the plants collected, presented by the Royal Society.

Chalmers (JAMES).

"Algae Scotica," 50 specimens in 1 vol. (1826), purchased 1880.

Chandler (ELIZABETH, *Miss*). [1818-84]

473 British plants, presented 1875.

Chapman (ALVAN WENTWORTH). [1809-99]

713 species of Florida plants, purchased 1845.

Chauvin (FRANÇOIS JOSEPH) [1797-1859] and **Roberge**.

"Algues de la Normandie," 200 specimens in 8 fascicles (1826-1838), acquired with Herb. Shuttleworth in 1877.

Chelsea Garden.

Plants forwarded in annual instalments of fifty to the Royal Society, in accordance with Sir Hans Sloane's deed of conveyance to the Apothecaries' Company, 1722-61.

Chesney (*Col.* FRANCIS RAWDON). [1789-1872]

99 plants collected in the Euphrates expedition, presented by the Board of Control 1837; many described in Bertoloni's "Miscellanea Botanica," pt. i (1842).

Christy (ROBERT MILLER). [1861-]

156 plants from Manitoba, presented 1886.

Clapperton (HUGH). [1788-1827]

Plants collected by Walter Oudney (1790-1824), Dixon Denham (1786-1828), and Hugh Clapperton during their expedition to Central Africa (1822-24), presented to Robert Brown and bequeathed by him.

- Clarke** (CHARLES BARON). [1834-]
11,155 specimens of Indian plants, presented 1875-1897.
- Clarke** (C. S., *Mrs.*).
113 plants from Natal, purchased 1890.
- Clarke** (JOSEPH).
1,000 plants from Ohio, purchased 1858.
- Clarke** ().
Plants collected in Virginia (1729), Carolina, Antigua, Montserrat (1734), and Bermuda, in Herb. Sloane.
- Claussen** ().
800 Brazilian plants and 260 woods, purchased 1841.
- Clayton** (JOHN). [1686 or 1693?-1773]
The types of the "Flora Virginica" (1762), acquired by Banks from Gronovius, the author of the "Flora."
- Clemente** (SIMON DE ROXAS) and **Leblech**.
"Plantas de Andalucia, 1803," purchased with Shuttleworth's herbarium.
- Clementi** (GIUSEPPE). [1812-73]
130 plants from Mount Olympus, purchased 1852.
- Cleve** (PEHR TEODOR) [1840-] and **J. D. Möller**.
Their diatoms, 324 microscope-preparations in 6 parts (1877-82), purchased with the Deby collection in 1893.
- Clifford** (GEORGE). [1685-1760]
His herbarium, containing the plants described by Linnæus in the "Hortus Cliffortianus" (1737); bought by Banks in 1791.
- Clifton** (GEORGE). [*fl.* 1853-90.]
565 Australian marine algae, being types quoted in Harvey's "Phycologia Australica," presented 1889, 1890.
- Clifton** (WILLIAM). [*fl.* 1765]
A few plants from Florida in Herb. Banks.
- Clinton** (G. W.).
Plants of Buffalo, New York.
- Cloisel** (J.).
201 plants from Madagascar, purchased 1891.
- Cocks** (JOHN). [1787-1861]
"Algarum fasciculi," 180 British specimens in 18 parts (1855-60), purchased 1867.
- Coles** (F. R.).
257 Kirkcudbrightshire plants, presented 1884.

Collie (ALEXANDER). [*d.* 1835]

852 plants of Western Australia, presented by the Lords of the Admiralty 1856.

Collins (FRANK SHIPLEY), ISAAC Holden [1832-1903], and WILLIAM ALBERT Setchell.

"Phycotheca Boreali-Americana," 1,075 specimens in 23 fascicles (1895-1902), purchased.

Collins (G. N.).

203 plants from Florida, purchased 1898.

Collinson (PETER). [1694-1768]

Specimens in Herb. Banks from his garden at Mill Hill.

Comber (THOMAS). [1837-1902]

His valuable collection of diatoms, consisting of 2,926 microscope-slides, 2,225 photographic negatives and lantern-slides, an illustrated descriptive catalogue in MS., and a quantity of herbarium material, presented by his widow, 1902.

Commerson (PHILIBERT). [1727-73]

Specimens in Herb. Banks, and others acquired with Herb. Brown.

Cooke (MORDECAI CUBITT). [1825-]

"Fungi Britannici exsiccati" (1865-72), 700 specimens, also 850 British and 300 exotic fungi, and 332 preparations for the microscope, purchased 1864-95. The second edition of his "Fungi Britannici," 600 specimens (1875-77), formed part of C. E. Broome's herbarium.

Cooper (DUNCAN E.).

222 plants from Melbourne, presented 1856.

Cooper (THOMAS).

1,078 plants from South Africa, presented by W. W. Saunders, 1865.

Cosson (ERNEST SAINT-CHARLES). [1819-89]

223 specimens from North Africa, acquired by exchange 1900.

Couch (BENJAMIN).

A collection of 805 specimens of woods, purchased 1840.

Coulter (THOMAS). [1793-1843] :

225 Californian plants, purchased 1869.

Courten (WILLIAM). [1642-1702]

Plants in Herb. Sloane.

Cowan (WILLIAM DEANS).

450 Madagascar plants, purchased 1883.

Creagh (CHARLES VANDELEUR, *C.M.G.*).

462 plants from Borneo, presented 1895-96.

Croall (ALEXANDER). [1809-85]

600 plants from Braemar, purchased 1858.

Crombie (JAMES MORRISON). [1833-]

His "Lichenes Britannici," 200 specimens (1874, 1877), also 2,929 British and exotic lichens, purchased 1870-1900.

Crome (GEORG ERNST WILHELM). [1780-1813]

120 mosses illustrating his "Sammlung Deutscher Laubmoose," 3 parts (1803-6), purchased.

Crueger (HERMANN). [1818-64]

West Indian Muscinea, acquired with the collections of Hampe and Stephani.

Cuming (HUGH). [1791-1865]

A selection from his Chilian collections (1827-31), purchased 1834; 2,433 plants from the Philippines, Malayan Peninsula, Sumatra, and St. Helena, purchased 1841.

Cummings (CLARA EATON), ROBERT S. Williams, and ARTHUR BLISS Seymour.

"Decades of North American Lichens" (1897-99), 320 specimens, purchased 1897-99.

Cunningham (ALLAN). [1791-1839]

Collection made with James Bowie in Brazil (1814-17) in Herb. Banks; collection of Australian plants, made 1818-26, presented by William Townsend Aiton.

Cunningham (DAVID DOUGLAS).

21 microscope-slides and specimens, being the types described in his paper on *Mycoides parasitica*, presented by the Council of the Linnean Society, 1878.

Cunningham (JAMES). [*d.* 1709?]

An important collection of Chinese plants made at Amoy, 1698-1703, including specimens from Chusan, etc. in Herb. Sloane. See Bretschneider, "European Botanical Discoveries in China," 34-44 and "Early European Researches in China," 36-88.

Curtis (CHARLES).

27 specimens of Dipterocarpeæ, presented 1888; 243 plants of Penang, purchased 1890; 333 Malayan plants, presented 1891-94.

Curtiss (ALLEN HIRAM). [1845-]

His published fascicles of North American flowering plants, purchased 1881-87, containing 1554 specimens; and 136 "Algæ Floridanæ," purchased 1896-98.

Cutler (CATHARINE, Miss). [*d.* 1866]

946 specimens, representing 337 species of British algæ, presented 1861.

Dahlstedt (HUGO GUSTAF ADOLF). [1856-]

400 Hieracia from Scandinavia, purchased 1890-91.

Dale (SAMUEL). [1659-1739]

Plants presented by the Company of Apothecaries, 1862.

Dalziel (JOHN M.).

80 Chinese plants, presented 1902.

Daniell (WILLIAM FREEMAN). [1818-65]

Small collections from West Africa and China, presented 1847-61.

Davies (GEORGE). [1834-92]

His herbarium of about 20,000 British and exotic mosses, hepatics and lichens, presented by his widow, 1892.

Davies (HUGH). [1739?-1821]

Herbarium of Welsh plants, containing types of his "Welsh Botany," purchased 1883.

Davy (JOSEPH BURTT). [1870-]

146 British plants, presented 1891.

Deakin (RICHARD). [*d.* 1873]

His herbarium of Italian and British lichens, about 1500 specimens, presented by Horatio Piggot in 1889.

Deasy (*Capt.* HENRY HUGH PETER).

226 plants from Chinese Turkestan, presented 1899.

De Bary (HEINRICH ANTON). [1831-88]

His collection of 4,429 microscope-preparations, illustrating his memoirs on plant-anatomy and parasitic diseases, purchased 1889.

Deby (JULIEN MARC). [1826-95]

A collection of 12,541 microscopic-preparations of Diatomaceæ, consisting of a large series systematically arranged, a series of spread slides, the entire collections of Hardman and of Donkin, a series from Walker Arnott, the sets published by Cleve and Möller, by Tempère and Peragallo, and others; also a remarkable series of type slides, purchased 1893.

Delamere (*Lord*).

321 plants from Tropical Africa, presented 1899.

Delise (DOMINIC FRANÇOIS). [*d.* 1841]

"Lichens de France" (1828), acquired with Herb. Ralfs.

Delogne (CHARLES HENRI).

His "Diatomées de Belgique," 100 microscope slides in 4 fascicles (1880-81), purchased.

Delogne (C. H.) and Fr. Gravet.

"Hépatiques de l'Ardenne," 60 specimens in 6 fascicles (1868-70), purchased 1899.

Denham (DIXON). [1786-1828]

See CLAPPERTON.

Deplanche (ÉMILE) [1824-75] and EUGÈNE Vieillard.

256 specimens of New Caledonian plants, purchased 1873.

De Ponthieu (HENRI).

Plants from the Caribee Islands, 1778, in Herb. Banks.

Déséglise (ALFRED). [*d.* 1883]

Herbarium Rosarum, a very large collection of critical Roses from various collectors, containing all the species described in his works, purchased 1884.

Desmazières (JEAN BAPTISTE HENRI JOSEPH). [1796–1862]

"Plantes cryptogames de France," 2,200 specimens in 44 fascicles (1825–51); edition ii, 1850 specimens in 37 fascicles (1836–51), acquired with Shuttleworth's herbarium in 1877; edition ii, series ii, 800 specimens in 16 fascicles (1853–60).

De Tabley (Lord). [1835–95]

Numerous contributions to British Herbarium, 1870, etc.

De Toni (GIOVANNI BATTISTA). [1864–]

"Herbarium Phycologicum," 2 decades (1896), purchased 1898.

De Toni (G. B.) and DAVID Levi-Morenos. [1863–]

"Phycotheca Italica," 200 specimens in 4 fascicles (1886–89), purchased.

Dick ().

"Herbarium Helveticum"—collection of Swiss plants, purchased by Banks from Dr. Pitcairn in 1775. *See* Journ. Bot., 1902, 388.

Dickie (GEORGE). [1812–82]

His arranged collection of about 7,000 algæ and 372 diatom slides, purchased 1883.

Dickson (JAMES). [1738–1822]

"Hortus siccus Britannicus," 1789–93. His collection of mosses and hepatics, containing the types of his published species, was purchased from his daughter in 1876.

Dietel (PAUL).

A set of his Uredineæ, purchased with Herb. Barclay in 1892.

Dietrich (AMALIA).

250 plants from Brisbane, purchased 1874.

Dillenius (JOHANN JAKOB). [1687–1747]

Plants from Wales in Herb. Sloane; mosses in Herb. Banks.

Dombey (JOSEPH). [1742–96]

Specimens of S. American plants in Herb. Banks.

Don (GEORGE). [1764–1814]

"Herbarium Britannicum," 1804, purchased 1875; other examples incorporated in British Herbarium.

Don (GEORGE). [1798–1856]

701 species from West Tropical Africa, including many of the types of Hooker's "Niger Flora," purchased 1856.

Donkin (ARTHUR SCOTT). [*f.* 1858-73]

486 microscope-preparations, acquired with the Deby collection in 1893.

Doody (SAMUEL). [1656-1706]

Numerous specimens in Herb. Sloane.

Doubleday (EDWARD). [1811-49]

697 North American plants, presented 1843-44.

Douglas (DAVID). [1798-1834]

1,460 plants from North-west America and California, containing many types published in Hooker's "Flora Boreali Americani," purchased 1856 from the Royal Horticultural Society.

Drege (JOHANN FRANZ). [1794-1881]

A set of his S. African collections, acquired with Shuttleworth's herbarium.

Drouet (HENRI). [1829-]

Plants from the Azores, acquired with Herb. Shuttleworth.

Druce (GEORGE CLARIDGE). [1860-]

358 British plants presented at intervals from 1881.

Drummond (JAMES). [1784?-1863]

3,597 plants of Western Australia, purchased 1843-54; others acquired with Robert Brown's Herbarium.

Drummond (THOMAS). [*d.* 1835]

"Musci Americani" collected in North America during the second Land Expedition (1825-28) of Sir John Franklin, presented by Dr. Richardson; another series—from the Southern States—was purchased in 1842.

Du Bois (CHARLES). [1656-1740]

Sent plants to Petiver and Plukenet, which are in Herb. Sloane.

Durand (PHILIPPE).

Plants collected at Tangier, 1798-1807. See Cosson, "Compendium Florae Atlanticae," i, 14.

Durand (THÉOPHILE) and HENRI F. DE FÁBREGA Pittier.

1180 plants from Costa Rica, purchased 1897.

Durieu de Maisonneuve (ELLY).

439 plants from Paraguay, purchased 1878.

Durieu de Maisonneuve (MICHEL CHARLES). [1796?-1878]

"Plantae selectae Hispano-Lusitanicae," 1835, acquired with Herb. Shuttleworth.

Dusén (PER). [1855-]

235 mosses and hepatics from the Cameroons and 468 from Chile and Patagonia, purchased at various times, 1893-1902.

Duthie (JOHN FIRMINGER). [1845-]

615 plants of Italy, Malta, etc., presented 1872-74; 4,140 Indian flowering plants and 553 cryptogams, acquired at various dates between 1881-1900.

Dyer (WILLIAM TURNER THISELTON) afterwards *Sir* W. T. Thiselton-Dyer. [1843-]

250 critical British plants, presented 1870, and 100 critical British plants, purchased 1871.

Earle (F. S. and E.).

237 plants from New Mexico, purchased 1901.

Eaton (ALFRED EDWIN).

24 plants from Spitzbergen, presented 1874; 139 lichens and algae from the Cape, presented 1876; 129 lichens and algae from Kerguelen's Land, presented by the Council of the Royal Society.

Eaton (DANIEL CADY) [1834-95], and **EDWIN Faxon**.

"Sphagna Boreali-Americana," 172 specimens, purchased 1897.

Ecklon (CHRISTIAN FRIEDRICH) [1795-1868] and **KARL LUDWIG PHILLIPP Zeyher**. [1799-1858]

340 South African plants, purchased 1883; specimens from these collectors were also added from Herb. Shuttleworth and from Herb. N. B. Ward; mosses acquired with Herb. Hampe.

Een (T. G.).

Collection of phanerogams from Dammara Land, containing numerous types described in *Journ. Bot.*, purchased 1879.

Eggers (*Baron* HENRIK FRANZ ALEXANDER). [1844-]

305 plants from the Bahamas, collected by him and presented by the Royal Society, 1888. 206 plants from St. Domingo, purchased 1900.

Eggleston (WILLARD WEBSTER).

105 plants from Vermont, purchased 1902.

Ehrhart (FRIEDRICH). [1742-95]

"Plantae cryptogamae Linnaei," 32 decades (1785-93); "Phytophylacium" (8 decades), 1780.

Eiben (C. E.).

"Ostfrieslands Laubmoose," 150 specimens in 3 parts (1866-69), purchased 1870 and 1885; "Brack- und Salz-wasseralgen," 1 decade (1870), purchased 1885; "Diatomeen der ostfriesische Inseln und Küsten," 10 microscope slides (1870), acquired with Herb. Deby 1893.

Elliott (GEORGE FRANCIS SCOTT). [1862-]

440 South African plants, presented 1888; 118 Madagascar plants, presented 1890; 456 North African plants, presented 1892; 1,399 plants from Sierra Leone, presented 1892-93; collection of plants from Ruwenzori, presented 1895.

Elliott (WILLIAM ROBERT).

1,097 cellular cryptogams collected in St. Vincent and Dominica, presented by the West India Exploration Committee, 1893.

Ellis (JOB BICKNELL) [1829-] and **BENJAMIN MATLOCK Everhart**. [1818-]

"North American Fungi," 3,600 specimens in centuries (1878-98), purchased 1900; and "Fungi Columbiani," continued by C. L. Shear and subsequently by Elam Bartholomew, 17 centuries of specimens (1894, etc.), purchased at intervals since 1896.

Endress ().

Plants of Pyrenees collected 1831, acquired with Herb. Shuttleworth.

Engelmann (GEORG). [1809-84]

100 specimens of *Juncus*, purchased 1886.

Engler (HEINRICH GUSTAV ADOLF). [1844-]

His "Araceae exsiccatae"; 3271 plants from Tropical Africa, Sandwich Islands, Japan, Brazil, etc., acquired by exchange from the Berlin Museum at various dates from 1884.

"Erbario Crittogamico Italiano."

Series i (1858-64), 1,200 specimens in 24 fascicles; series ii (1864-81), 1,100 specimens in 22 fascicles; purchased at various times 1861-81.

Eriksson (JAKOB). [1848-]

"Fungi parasitici Scandinavici," 500 specimens in 10 fascicles (1882-95), purchased.

Ernst (ADOLF). [*d.* 1900]

A small collection of plants from Caracas.

Étienne (G.).

"Mousses de la Normandie," 200 specimens in 4 fascicles (1870-74), purchased.

Eulenstein (THEODOR).

"Diatomacearum species typicae," 100 microscope-preparations (1867), purchased 1868.

Everett (A. H.).

100 plants from Lombok, purchased 1896.

Fabricius (PHILIPP KONRAD). [1714-74]

Plants from the Helmstadt Garden, of which he was curator, in Herb. Banks.

Farlow (WILLIAM GILSON). [1844-]

476 cellular cryptogams from North America, Hawaii, etc., presented at various times, 1889-1902.

Farlow (W. G.), **C. L. Anderson** and **D. C. Eaton**.

"Algae Americae borealis," 230 specimens in 5 fascicles (1877-89), purchased.

Fawcett (WILLIAM). [1851-]

688 Jamaica phanerogams and 221 cryptogams, presented at intervals since 1887.

Feilden (Col. HENRY WEMYSS). [1838-]

60 phanerogams from Disco, Greenland, presented 1876; 25 plants from Kolguev, presented 1896; 302 from Novaya Zemlya, presented 1898; 45 plants from the Cape, presented 1902.

Feilding (J. B.).

Malayan grasses, presented 1893.

Fellman (N. J.).

400 plants from East Lapland, purchased 1878.

Fendler (AUGUST). [1813-83]

1,729 phanerogams from New Mexico, purchased 1848-57; 182 ferns from Venezuela, purchased 1856; 128 ferns from Trinidad, purchased 1878-80; 43 cryptogams from Trinidad, purchased 1880.

Ferguson (WILLIAM). [1820-87]

Set of his Ceylon algae acquired with Herb. Dickie.

Ferro (GIOVANNI MARIA). [1603-73]

Herbarium in three volumes, presented by the Director of Kew Gardens in 1890. See Journ. Bot., 1890, 278.

Fiedler (CARL FRIEDRICH BERNHARD). [1807-69]

"Musci frondosi," 150 Mecklenburg species in 3 fascicles (1842-43), purchased; "Beiträge zur Mecklenburgischen Pilzflora," 163 specimens in three parts, purchased.

Fielding (E.).

225 plants from Cordova, La Plata, purchased 1872.

Fitzgerald (ROBERT DAVID). [1831?-92]

235 Australian orchids, presented 1883-91.

Flahault (CHARLES HENRI MARIE). [1852-]

60 types illustrating the "Revision des Nostocacées hétérocystées" of Bornet and Flahault, presented 1891.

Fleischer (MAX). [1858-]

"Musci Archipelagi Indici," 250 specimens in 5 fascicles (1898), purchased.

Fleischer and Warnstorff.

"Bryotheca Europaea meridionalis," two centuries of mosses (1896, 1897), purchased.

Flörke (HEINRICH GUSTAV). [1764-1835]

"Deutsche Lichenen," 200 specimens in 10 fascicles (1815-21), purchased 1875.

Fogg (S. A., Miss).

132 Australian algae, purchased 1877.

Forbes (FRANCIS BLACKWELL). [1839-]

301 Chinese plants, presented 1875.

Forbes (HENRY OGG). [1851-]

4,654 plants from the Eastern Archipelago, including types of the species described in his "Naturalist's Wanderings" and elsewhere, purchased 1879-88.

Forbes (JOHN). [1798-1823]

317 plants from South Africa and Madagascar, purchased 1856.

Forskål (PEHR). [1736-63]

Numerous specimens (types for his "Flora Ægyptiaco-Arabica") in Herb. Banks, and 180 plants acquired with Herb. Nolte, 1875.

Forster (EDWARD). [1765-1849]

Herbarium, principally of British plants, presented by Robert Brown.

Forster (JOHN REINHOLD) [1729-98] and **GEORGE**. [1754-94]

Plants collected during Cook's second voyage (1772-75) presented to Banks on their return; herbarium of George Forster purchased at Lambert's sale (1842), described by D. Don as his "entire herbarium, from which he published his Florula of South Sea plants"; another set of G. Forster's plants is in Pallas's Herbarium, purchased at the same sale. In 1776 Banks bought for £400 all the drawings made during the voyage.

Forsyth Major (CHARLES IMMANUEL). [1843-]

439 phanerogams from Madagascar, purchased 1896.

Fortune (ROBERT). [1813-80]

549 specimens of Chinese plants, purchased 1845-62.

Fothergill (JOHN). [1712-80]

Numerous plants in Herb. Banks from his garden at West Ham.

Fourcade (CHARLES). [1826?-91]

672 Pyrenean plants, purchased 1864.

Fraser (CHARLES). [*d.* 1831]

Plants from the north-west interior of Australia, collected 1818.

Fraser (LOUIS).

352 South American plants, purchased 1860-61.

French (ALFRED). [1839-79]

Herbarium of Oxfordshire plants, purchased 1880.

Fries (ELIAS MAGNUS). [1794-1878]

"Herbarium normale Plantae Scandinavicae," Cent. 1-10, purchased 1875; "Scleromyceti Suecicae," 300 fungi in 30 decades (1819-22), presented by the Council of the Linnean Society, 1896.

Fries (THÖRE MAGNUS). [1832-]

"Lichenes Scandinaviae," 75 specimens in 3 fascicles (1859-65), presented by the Council of the Linnean Society, 1896.

Frivaldsky (IMRÉ). [1799–1870]

Oriental plants acquired with Herb. Shuttleworth.

Fuckel (KARL WILHELM GOTTLIEB LEOPOLD). [1821–76]

“Fungi Rhenani,” edition i with 2700 specimens in 27 fascicles (1863–74), bequeathed with Herb. Broome, 1887, and edition ii with 600 specimens in 6 fascicles (1874), purchased.

Funck (HEINRICH CHRISTIAN). [1771–1839]

“Cryptogamische Gewächse des Fichtelgebirgs,” edition i (1800) incomplete; edition ii, 865 specimens in 42 fascicles (1806–38), purchased 1875.

Funck (NICOLAS) [1816–96] and **LOUIS JOSEPH Schlim**.

Plants from Venezuela acquired with Herb. Shuttleworth.

Gagliardi (G.).

74 hepatics, 313 mosses and 665 lichens from the Simplon Pass, presented 1863–64.

Gaillard (A.).

90 Venezuelan fungi, purchased 1890.

Gamble (JAMES SYKES).

863 Indian plants, presented 1885–87.

Gandoger (MICHAEL). [1850–]

984 plants from North Africa, etc., purchased 1880.

Gardiner (WILLIAM). [1808–52]

200 Forfarshire plants and 250 cryptogams, purchased 1850.

Gardner (GEORGE). [1812–49]

Ceylon plants acquired with Herb. Miers; herbarium of Brazilian plants (5,746 species), containing numerous types described by him and other botanists, purchased from his executors, 1851.

Garovaglio (SANTO). [1805–82]

“Muschi dell’ Austria inferiore,” 6 decades of specimens (1836), purchased 1899.

Gasparrini (GUGLIELMO). [1804–66]

Italian plants acquired with Herb. Shuttleworth.

Gepp (ETHEL SAREL, *Mrs.*).

196 British marine algae and 111 slides, presented 1892.

Gerard (*Gen.* PATRICK). [1842–]

134 plants from the Western Himalaya, presented 1861.

Germain (PHILIP).

702 plants from Chili, purchased 1857–68.

Gerrard (WILLIAM TYRER). [*d.* 1866]

1600 plants from Zulu-land, purchased 1865.

- Geyer** (CHARLES ANDREAS). [1809-53]
600 plants from Illinois, Missouri, and Oregon, purchased 1845.
- Ghiesbreght** (AUGUST).
384 Mexican plants, purchased 1873.
- Gibson** (ERNEST).
153 plants from Buenos Ayres, presented 1901.
- Gill** (WILLIAM JOHN). [1843-82]
A small collection of Chinese plants, presented 1877.
- Gillies** (JOHN). [*d.* before 1837]
250 Chilian Compositae, purchased 1863; other specimens acquired in Shuttleworth collection.
- Golde and Meinshausen**.
811 plants from South Russia, purchased 1871-75.
- Gordon** (JAMES) [*d.* 1780].
Plants from his garden at Mile End (1753-76) in Herb. Banks.
- Gottsche** (CARL MORITZ). [1808-92]
Many authentic specimens of hepatics described by him, acquired with Herb. Hampe in 1881.
See RABENHORST.
- Grabowsky** (HENRI EMANUEL).
407 plants from Borneo, purchased 1884.
- Graeffe** (EDUARD).
209 ferns and 30 lichens from Samoa, etc., purchased 1874.
- Graells** (MARIANO DE LA PAZ). [1818?-98]
650 Spanish plants ("Herbarium Castellanicum") purchased 1872.
- Gray** (ASA). [1818-88]
Specimens of N. American plants, including many types, presented at various dates.
- Gray** (EDWARD WHITAKER). [1748-1806]
Plants from Oporto, sent to Banks in 1777.
- Gray** (MARIA EMMA, *Mrs.*). [1787-1876]
149 algæ from Swanage, presented 1861; 201 species, named by Agardh, presented 1870.
- Greene** (EDWARD LEE). [1843-]
364 Californian plants, acquired 1885-95.
- Greenstock** (W.).
Collection from Natal, purchased 1880.
- Gregory** (JOHN WALTER). [1864-]
Collections from East Equatorial Africa, collected by him and presented 1893; plants from Dominica and Antigua, presented 1899.

Gregory (WILLIAM). [1803-58]

His collection of diatoms, 1,434 slides, purchased 1866.

Greville (ROBERT KAYE). [1794-1866]

5,248 microscope preparations of Diatoms, containing his types, purchased 1866.

Grey (ELIZA LUCY, Mrs.).

340 specimens of South Australian plants, presented 1841, 1845.

Griffith (WILLIAM). [1810-45]

A large collection of Bhotan plants presented by the Hon. East India Company, 1849-50; 431 species of Malacca plants, purchased 1869.

Griffiths (AMELIA W., Mrs.). [1768-1857]

780 specimens, representing 293 species of British sea-weeds, purchased 1852.

Gronovius (JOHANNES FRIDERICUS). [1611-71]

Herbarium containing Clayton's Virginian plants, purchased in 1794 by Sir Joseph Banks from John Earl of Bute, who bought it for £90 in 1778.

Grove (EDMUND).

153 microscope preparations of diatoms from St. Vincent, presented 1899.

Groves (HENRY). [1835-91]

539 Italian plants, presented 1885-87.

Groves (HENRY, [1855-] and JAMES [1858-])

"Characeae Britannicae" (60 specimens in 2 fascicles), purchased 1892, 1900; 78 British plants, presented from 1881 to the present time.

Gruner (LEOPOLD).

927 plants from South Russia, purchased 1871.

Gunn (RONALD CAMPBELL). [1808-81]

Tasmanian plants.

Gussone (GIOVANNI). [1787-1866]

Italian plants, acquired with Herb. Shuttleworth.

Hackel (EDUARD).

72 specimens of Festuca, presented 1887.

Haenke (THADDÆUS). [1761-1817]

See PRESL.

Hahn (LUDWIG). [1836-81]

988 plants from Martinique, purchased 1868-70; 149 plants from the Cape, presented 1876; mosses acquired with Herb. Bescherelle.

Hall (ELIHU). [1822-82]

633 Oregon plants, purchased 1872; 850 Texan plants, purchased 1873.

Hall, Harbour and Parry.

700 plants of the Rocky Mountains, purchased 1864.

Hamilton.*See* BUCHANAN.**Hampe** (GEORG ERNST LUDWIG). [1795-1880]

Collection of 4,934 hepatics, purchased 1878; moss herbarium of 24,932 specimens, purchased 1881, each containing numerous types. The mosses and hepatics of his "Vegetabilia cellularia" were purchased with Herb. Shuttleworth in 1877.

Hanbury (DANIEL). [1825-75]

Specimens chiefly of economic plants, presented 1853-72.

Hance (HENRY FLETCHER). [1827-86]

Herbarium containing 22,437 specimens, including types of the Chinese plants described by him, purchased 1887.

Hansen.

13 centuries (1,285 specimens) of plants from Schleswig-Holstein, purchased with Herb. Nolte, 1875.

Hansen (GEORGE).

1,596 plants from California, purchased 1896-99.

Hardman (LAWRANCE).

His entire collection of nearly 30,000 select diatoms, typical of all the most celebrated deposits, and mounted on 1,444 slides, purchased as part of Deby's collection in 1893.

Hardwicke (THOMAS). [*d.* 1835]

247½ plants from Mauritius, sent to Banks, 1811-12; 1,482 specimens of woods from South Africa and St. Helena, bequeathed 1836.

Harlow (JAMES). [*f.* 1660-80]

Plants collected in Jamaica, presented to Sloane by Sir John Rawdon.

Harper (ROLAND McMILLAN).

1,187 plants from Georgia, purchased 1901-2.

Hart (HENRY CHICHESTER).

1,162 plants from Mount Sinai, etc., collected during the Palestine Exploring Expedition, acquired 1885.

Hartman (ROBERT WILHELM). [1827-91]

"Bryaceae Scandinaviae," 450 specimens in 15 fascicles (1857-74), purchased.

Hartweg (CARL THEODOR). [1812-71]

1,833 plants from California, Central and South America, presented 1839-48.

Harvey (WILLIAM HENRY). [1811-66]

Numerous South African and Fiji phanerogams, purchased 1869; 1,199 algae from Australia, the Friendly Islands, and Ceylon, acquired at various dates between 1857 and 1900.

Haslar Hospital.

Collections received from, *see* p. 92.

Hassall (ARTHUR HILL). [1817-94]

His herbarium, containing 883 specimens, the types of his work on the "British Freshwater Algae," presented by his widow, 1894.

Hauck (FERDINAND) [1849-89] and **PAUL Richter**.

"Phykotheke Universalis," 750 algae in 15 fascicles (1885-96), purchased.

Haussknecht (H. CARL). [*d.* 1903]

3,668 plants from Asia Minor and the Caspian region, purchased 1870; 2,928 plants from Greece, purchased 1889.

Havers (T.).

82 plants from the Falkland Islands, presented 1874.

Haviland (GEORGE DARBY). [1857-]

1,031 Bornean plants, received 1893-97.

Hayes (SUTTON). [*d.* 1863]

1,320 plants from Panama, purchased 1863-64.

Hector (*Sir* JAMES). [1834-]

200 New Zealand plants, presented 1876.

Heldreich (THEODOR VON). [1822-1902]

3,220 plants from Greece, purchased at various dates from 1845 to 1897.

Helfers (JOHANN WILHELM). [*d.* 1840]

Published set of Indian plants ("Fl. Indiæ Orient.") acquired with Herb. Shuttleworth.

Hellbom (PEHR JOHAN). [1827-1903]

750 lichens and 250 mosses from Scandinavia, purchased in 1872 and 1891.

Heller (A. ARTHUR). [1867-]

625 plants from New Mexico and 291 from the Hawaiian Islands, purchased 1895-97.

Henriques (JULIO AUGUSTO).

198 specimens of Portuguese plants obtained by exchange, 1887; 142 plants from St. Thomas, West Africa, presented 1888.

Hepp (PHILIPP). [*d.* 1867]

His cryptogamic herbarium containing 2,406 lichens, 778 mosses and 1,640 algae, purchased 1868; also his "Flechten Europas," 962 specimens in 32 fascicles (1853-67), purchased 1874.

Hermann (PAUL). [1640-95]

His herbarium in 4 vols. of Ceylon plants (with a few from the Cape of Good Hope). It was sent in 1745 by Augustus Günther, an apothecary at Copenhagen, to Linnaeus, who based upon it his "Flora Zeylanica"; the specimens are named in Linnaeus's hand. It afterwards came into the possession of Count Adam Gottlob Moltke, at whose death it was bought by Prof. Treschow of Copenhagen, who sold it to Sir Joseph Banks for £75. A full account of its contents will be found in Journ. Linn. Soc.

(Botany) xxiv, 129-155. A small collection from the Cape and plants from the Leyden Garden are in Herb. Sloane.

Henry (AUGUSTINE). [1857-]
3,090 Chinese plants, purchased 1891, 1895.

Herpell (GUSTAV).

"Sammlung präparirter Hutpilze," 135 fungi, in 6 fascicles, 1880-92.

Heudelot.

117 plants from Senegal, purchased 1861.

Hieronymus (GEORG HANS EMO WOLFGANG). [1846-]

177 plants from Argentina, purchased 1880.

Hildebrandt (JOHANN MARIA). [1847-81]

1,700 plants from Arabia and East Africa, purchased 1873-84; 707 plants from Madagascar, purchased 1883-4.

Hill (JOHN). [1716-75]

Collection of British plants incorporated in the British Herbarium.

Hillebrand (WILLIAM). [1821-86]

452 specimens of plants from the Sandwich Islands, acquired by exchange 1890.

Hilsenberg (CARL THEODOR) [1802-24] and **W. Bojer.**

Collection of Madagascar plants, purchased 1830; 651 Madagascar plants, purchased 1863, 1873.

Hirase (Y.).

114 marine algae of Japan, presented 1901.

Hobson (EDWARD). [1782-1830]

"British Mosses and Hepaticae," 174 specimens in 2 volumes (1818 and 1822).

Hodgson (ELIZABETH, Miss). [1814-77]

Herbarium of North Lancashire plants as recorded in Journ. Bot. 1874, presented.

Hohenacker (RUDOLPH FRIEDRICH). [1798-]

650 Caucasian plants, purchased 1846; "Algae marinae," 600 specimens in 12 fascicles (1852-62), purchased.

Holl (C. FRIEDRICH), JOHANN KARL Schmidt [1793-1850], and **GUSTAV Kunze** [1793-1851]

"Deutschlands Schwaemme," 225 specimens in 9 fascicles (1815-19), purchased.

Holl (HARVEY BUCHANAN). [1820-86]

295 British lichens, presented 1868; also his herbarium of lichens and mosses, presented 1886.

Holmes (EDWARD MORELL). [1843-]

"Algae Britannicae rariores," 250 specimens in 10 fascicles (1883-1900); also 204 cryptogams, acquired 1876-1900.

Home (*Sir* EVERARD). [1756-1832]

141 plants from the east coast of China, presented 1843-44; 1,286 plants from Australia and the Pacific, presented 1846 and 1853.

Hooker (*Sir* JOSEPH DALTON). [1817-]

1,404 species, being all the phaenogamous and great part of the cryptogamous plants of New Zealand collected during the voyage of the *Erebus* and *Terror*, 1839-43, presented 1845-54.

Hooker (*Sir* J. D.) and THOMAS THOMSON.

6,246 Indian plants, presented 1855-61.

Hope (CHARLES WILLIAM WEBLEY). [1832-1904]

A collection of Assam ferns, presented 1889.

Hoppe (DAVID HEINRICH). [1760-1846]

"*Hortus botanicus Ratisbonensis*," 3 fascicles (1807-9), and "*Fungi epiphylli*," 2 decades (1809-10); published set of phanerogams; all acquired with Herb. Shuttleworth.

Horneman (JENS WILKEN).

Plants from Greenland and Lapland, acquired with Herb. Shuttleworth and Herb. Nolte.

Horrell (ERNEST CHARLES). [1870-]

245 British mosses, mostly Sphagna, purchased 1903.

Horsfield (THOMAS). [1773-1859]

Herbarium of Javanese plants, containing the types of Brown and Bennett's "*Plantae Javanicae Rariores*," presented by the Directors of the Hon. East India Company, 1858.

Hose (CHARLES).

1,631 plants from Borneo and Celebes, purchased 1900-2.

Hostmann (F. W.).

1,168 plants of Surinam, purchased 1842-43.

Houstoun (WILLIAM). [1695-1733]

His herbarium, drawings, and MSS. were bequeathed to Philip Miller, from whom they were purchased by Banks. Specimens grown by Miller in Chelsea Garden from seed sent by Houstoun are in Herb. Sloane 146 and 316. The plants were collected by Houstoun in Jamaica, Havana, Vera Cruz and Campeachy, and are the types of numerous descriptions in Miller's "*Gardeners Dictionary*," ed. viii (1768), and of "*Reliquiae Houstounianae*" (1781).

Howell (THOMAS). [1842-]

197 plants from the Pacific coast, purchased 1886.

Howie (CHARLES). [1811-99]

"*Musci Fifenses*" (c. 1860), 112 specimens, purchased 1897.

Huet de Pavillon (E. and A.).

1,588 specimens from Sicily and the East, purchased 1854-67.

Hugh (*Father*).

3,707 plants from Central and Northern China, purchased 1896-1901.

Humblot (*LÉON*).

596 plants from the Comoro Islands, purchased 1885-87.

Hunt (*THOMAS CAREW*). [*d.* 1886]

Plants from the Azores, acquired with Herb. Miers.

Hunter (*ROBERT*). [1824?-97]

A small collection of Bermudan ferns, presented 1877.

Hurst (*HENRY ALEXANDER*). [1825?-82]

409 plants from Gibraltar and Egypt, presented 1869-81.

Husnot (*PIERRE TRANQUILLE*). [1840-]

"Musci Galliae," 900 specimens in 18 fascicles (1870-97); "Hepaticae Galliae," 231 specimens in 9 fascicles (1873-1901); also 106 Glumiferae and 270 cryptogams of the Antilles, purchased 1873 and subsequently.

Huter (*RUPERT*).

2,698 European plants (Dalmatia, the Tirol, N. Italy and Spain), purchased 1867-80.

Jack (*JOSEPH BERNHARD*) [1818-1901], **LUDWIG Leiner** [*d.* 1901], and **ERNST Stizenberger** [1827-95]

"Kryptogamen Badens," 1,000 specimens in 21 fascicles (1860-66), purchased.

Jackson (*FREDERICK JOHN*).

213 plants from East Africa, presented 1895.

Jacquin (*NICOLAUS JOSEPH*). [1727-1814]

His herbarium, purchased by Banks and incorporated in the Banksian collection.

Jaczewski (*ARTHUR DE*), **WALDIMIR L. Komarov** and **WOLDEMAR Tranzschel**.

"Fungi Rossiae," 350 specimens in 7 fascicles (1895-99), purchased.

Jameson (*HAMPDEN GURNEY*). [1852-]

His herbarium of British mosses containing 3,121 specimens, purchased 1899.

Jameson (*WILLIAM*). [1796-1873]

2,757 phanerogams and 181 mosses from Columbia and Ecuador, purchased 1846-69; and a set of mosses acquired with Herb. Wilson.

Jan (*GEORG*). [1791-1866]

"Flora Italiae super.," acquired with Herb. Shuttleworth.

Jayakar (*A. S. G.*).

188 plants from Arabia, presented 1899.

Jenman (*GEORGE SAMUEL*). [1845-1902]

630 plants from British Guiana, presented 1887-90.

Jenner (EDWARD). [1803-72]

Herbarium of freshwater algae, containing 6,000 specimens, purchased 1893.

Johnson (WILLIAM).

"North of England Lichen-Herbarium," 360 specimens in 9 fascicles (1894-1900), purchased.

Johnston (Sir HARRY HAMILTON). [1858-]

461 plants from Tropical Africa, presented 1885-93.

Jones (MARCUS E.).

5,193 North American phanerogams and 445 cryptogams, purchased 1884-98.

Jordan (ALEXIS). [1814?-97] and others.

1,800 rare French plants, purchased 1872.

Joshua (WILLIAM).

His lichen herbarium, containing 1,464 specimens representing 976 species, purchased 1880; 1,039 microscope-preparations of cellular plants, purchased at various times, 1880-86.

Joshua (W.) and E. M. Holmes.

"Microscopical Slides of British Lichens," 48 specimens in one fasciculus (1879), purchased 1880.

Junghuhn (FRANZ WILHELM). [1812-64]

236 plants from Java, presented 1850.

Jürgens (GEORG HEINRICH BERNHARD).

"Algae aquaticae" of East Friesland, 20 decades (1816-24), purchased 1875.

Jürgensen ().

208 Mexican plants, purchased 1861.

Juratzka (JAKOB). [1821-78]

Austrian and Hungarian mosses acquired with Herb. Hampe.

Jussieu (ANTOINE LAURENT DE). [1748-1836]

Plants from the Paris Garden in Herb. Banks.

Kaempfer (ENGELBERT). [1651-1716]

Japanese plants (collected 1691-92) in Herb. Sloane 211. The Coniferae form the subject of a paper by R. A. Salisbury in Journ. Science and Arts, ii, 309-314 (1817).

Kässner (THEODOR).

1,029 Tropical African plants, purchased 1902.

Kalbreyer (E.).

230 plants from Western Tropical Africa, presented 1878.

Kalm (PEHR). [1715-79]

Specimens from Canada in Herb. Banks.

Kamel (GEORG JOSEPH). [1661-1706]

A Jesuit missionary to the Philippines, sent a collection to Petiver in 1701, which is now in Herb. Sloane (vols. 153, 231, 233). A volume containing Kamel's figures and MS. descriptions of this collection (Bibl. Sloane 5,288) was transferred to the Department of Botany from that of MSS. in 1884; the descriptions were printed in the Appendix to vol. iii. of Ray's "Historia Plantarum," pp. 43-94. Other descriptions by Kamel form Sloane MSS. 4,078 and 4,081.

Karelín (GHRĪGHORŪ SĪLUICH) and PORPHYRIUS Kiriloff.

A set of their collections in Central Asia, 1841-44.

Karo (FERDINAND).

348 plants from Dahuria, purchased 1892; 392 "Plantae Americae," purchased 1902.

Karsten (PETER ADOLF). [1834-]

"Fungi Fenniae," 1000 specimens in 10 centuries (1865-70), purchased 1873.

Keir (WALTER). [*fl.* 1699]

Sent plants from Malacca and China to Petiver, acquired with Herb. Sloane.

Kellerman (WILLIAM A.) and W. T. Swingle.

"Kansas Fungi," 50 specimens in 2 fascicles (1889), purchased 1899.

Kellogg (ALBERT). [1813-87]

525 Californian plants, purchased 1873.

Kerber (ED.).

689 Mexican plants, purchased 1884-85.

Kerner von Marilaun (ANTON JOSEF). [1831-98]

90 critical Salices, purchased 1883; his "Flora exsiccata Austro-Hungarica," acquired at various dates.

Kiggelaer (FRANZ).

Collection of Cape plants, made in 1701, in Herb. Sloane.

King (*Sir* GEORGE). [1844-]

6,391 Indian and Malayan plants, presented at various intervals from 1886.

King (*Capt.* PHILIP PARKER). [1793-1856]

1,120 plants of extra-tropical South America, collected during the voyage of survey in the *Adventure* and *Beagle*, and presented by him 1845; plants collected in Chili, 1826-27.

King (RICHARD). [*fl.* 1833-36]

See BACK.

Kirk (THOMAS). [1828-97]

700 New Zealand plants purchased 1883, and 89 presented later; hepatics acquired with the Stephani collection.

Kitaibel (PAUL). [1757-1817]

Types of his Hungarian plants acquired with Herb. Shuttleworth.

Kitton (FREDERIC). [1828-95].

"Norfolk Diatoms," 50 slides in 2 series, purchased 1885 and 1893.

Klönne (J.) and G. Müller.

64 microscope-preparations of bacteria, purchased 1885.

Kneiff (FRIEDRICH GOTTHARD) [*d.* 1832] and **EMANUEL FRIEDRICH Hartmann.**

"Plantae Cryptogamicæ" of Baden, 200 specimens in four fascicles (1828-30), purchased 1871.

Kneiff (FRIEDRICH GOTTHARD) [*d.* 1832], and **Maercker.**

"Musci frondosi," of Alsace, 250 specimens in 10 fascicles (1825-32), acquired with Herb. Shuttleworth.

Kneucker (J. ANDREAS).

Sets of German Cyperaceæ, Juncaceæ and Graminae, purchased at various dates.

Knight (CHARLES).

100 New Zealand lichens, purchased 1877.

Koehne (BERNHARD ADALBERT EMIL). [1848-]

"Herbarium Dendrologicum," 335 specimens purchased 1897-1900.

Koenig (JOHANN GERHARD). [1728-85]

Sent Indian plants to Banks, 1776; herbarium and MSS. bequeathed to Banks.

Kotschy (THEODOR). [1813-66]

4,263 plants from the Orient, Levant, and Nubia, purchased 1840-67.

Kralik (JEAN LOUIS). [1813-92]

395 plants from Tunis, purchased 1856.

Krättli (J. L.).

165 plants from the Engadine, purchased 1870.

Krauss (FERDINAND).

513 plants from Natal, purchased 1840.

Krieg (DAVID). [*f.* 1699-1703]

Maryland plants in Herb. Sloane.

Krieger (KARL WILHELM).

"Fungi Saxonici," 1700 specimens in 34 fascicles (1885-1902), purchased; "Schädliche Pilze unserer Kulturgewächse," 100 specimens in 2 fascicles (1896 and 1899), purchased 1899.

Kützing (FRIEDRICH TRAUOGT). [1807-93]

"Algarum aquae dulcis Germanicarum decades xvi" (1833-36), purchased; 835 marine algae, purchased 1867, and his entire collection of Diatomaceæ, nearly 200 gatherings, purchased 1868.

Kunze (JOHANN). [*d.* 1881]

"Fungi selecti exsiccati," 410 specimens in 8 fascicles (1875-79), purchased 1878-81.

Kurz (SULPIZ). [1833?-78]

432 cryptogams of Burmah, presented 1874; other specimens acquired with the collections of Hampe and Stephani.

La Billardière (JACQUES JULIEN HOUTON DE). [1755-1834]

Specimens from Australia in Herb. Banks, Herb. Brown, and Herb. Pallas; mosses and hepatics in Herb. Beschereille and Herb. Stephani.

La Peyrouse (PHILIPPE PICOT). [1744-1818]

Plants from Pyrenees in Herb. Roemer, acquired with Herb. Shuttleworth.

Laestadius (LARS LEVI). [1800-61]

96 species of *Salix*, purchased 1869 from Herb. N. B. Ward.

Lagasca (MARIANO). [1776-1839]

A few plants in Herb. Banks.

Lambert (AYLMER BOURKE). [1761-1842]

Among the purchases at the sale of his collections in 1842 were the herbaria of Pallas, Ruiz and Pavon, and George Forster, with Indian plants from F. Buchanan Hamilton, and plants from French Guiana collected by Martin.

Lamont (JAMES).

499 Hong Kong plants, presented 1874; 362 Australian phanerogams and 96 mosses, presented 1884, 1890-91.

Landor (A. H. SAVAGE).

70 plants from Tibet, presented 1898.

Larbalestier (CHARLES DU BOIS).

"Lichenes Caesarienses et Sargienses," 280 specimens in about 6 fascicles (1867-72), purchased 1868, 1873; "Lichen Herbarium," 360 specimens in 9 fascicles (1879-81), purchased 1880 and subsequently; "Lichenes Aegyptiaci," 22 specimens, purchased 1880; a series of rare British lichens, purchased 1880.

Lauterbach (CARL).

108 plants from New Guinea, purchased 1898.

Lawrence (*Sir* JAMES JOHN TREVOR). [1831-]

Specimens of cultivated orchids, presented at intervals since 1885.

Lawson (ISAAC). [*fl.* 1737-47]

Plants from Padua in Herb. Sloane.

Lawson (JOHN). [*d.* 1712]

Carolina plants in Herb. Sloane.

Lawson (MARMADUKE ALEXANDER). [1840-96]

100 Indian plants, presented 1887.

Lay (GEORGE TRADESCANT). [*d.* 1845]

A small collection from Macao, collected during Beechey's voyage in 1827.

Lea (THOMAS GIBSON). [*d.* 1849?]

Cincinnati mosses acquired with Herb. Wilson.

Lea (THOMAS SIMCOX).

¶1,377 Australian plants, 125 from Hawaii and others from Brazil; presented 1886-87.

Leche (JOHAN). [1704-64]

Swedish plants in Herb. Banks.

Ledebour (KARL FRIEDRICH VON). [1785-1851]

A few plants in Herb. Banks.

Leefe (JOHN EW BANK).

"Salictum Britannicum," purchased 1862.

Lehmann (FRIEDRICH CARL). [1850-1903]

3,369 plants from Central and South America, purchased 1887-93.

L'Herminier (FÉLIX LOUIS). [1779-1883]

134 ferns of Guadaloupe, purchased 1873; a series of mosses from Guadaloupe in Herb. Hampe and Herb. Bescherelle.

Leichardt (FRIEDRICH WILHELM LUDWIG). [1813-48]

A collection of Australian plants, purchased 1858.

Leighton (WILLIAM ALLPORT). [1805-89]

"Lichenes Britannici," 410 specimens in 13 fascicles (1851-1867), and 230 Welsh lichens, purchased at intervals 1866-1875.

Le Jolis (AUGUSTE FRANÇOIS).

"Algues marines de Cherbourg," 280 specimens in 14 fascicles (c. 1863), purchased 1880.

Lemmon (JOHN GILL).

2,284 plants from Arizona, etc., purchased 1882-86.

Lesquereux (LEO). [1800?-89]

North American plants, and cryptogams from the Jura, acquired with Herb. Shuttleworth.

Libert (MARIE ANNA, *Mlle.*). [1782-1865]

"Plantae cryptogamicæ" of the Ardennes, 400 specimens in 4 fascicles (1830-37), purchased 1866.

Liebman (FREDERIK MICHAEL). [1813-56]

Mexican hepatics acquired with Herb. Hampe.

Limminghe (*Count* ALFRED DE). [*d.* 1861]

A large series of lichens, purchased 1862; among them are a number of specimens from Commerson, which were given by Jussieu to Dr. H. A. Weddell and by him given to Mr. Gray, who presented them to Count Limminghe.

Lindberg (GUSTAF ANDERS). [1832-1900]

Brazilian Muscineae acquired with the collections of Hampe and Stephani.

Lindberg (SEXTUS OTTO). [1835-1889]

2,057 mosses, including many authentic specimens, from his herbarium, purchased 1886.

Lindberg (S. O.) and E. FR. **Lackström**.

"Hepaticae Scandinavicae," 50 specimens (1874), purchased 1875.

Lindeberg (CARL JOHAN). [1815-1900]

"Hieracia Scandinavicae exsiccata," purchased.

Linden (JEAN JULES). [1817-98]

1,143 plants from Columbia, purchased 1843-68.

Lindheimer (FERDINAND). [1801-79]

775 plants from Texas, purchased 1845-50.

Lindig (ALEXANDER).

The types of his lichens from New Granada, 667 specimens, purchased 1875; also the types of his mosses, acquired with Herb. Hampe.

Lindsay (WILLIAM LAUDER). [1829-80]

343 lichens and other cryptogams, presented 1871; plant-remains from New Zealand, Scotland, etc., presented 1874.

Linhart (GYÖRGY). [1844-]

"Fungi Hungarici," 5 centuries (1882-86), purchased 1899.

Linnaeus (CARL). [1707-78]

The herbarium of PAUL HERMANN (*q.v.*) contains the plants on which Linnaeus's "Flora Zeylanica" is based, with names in his MS. A few specimens were obtained by Banks from the Linnaean herbarium by exchange with Sir J. E. Smith. Clifford's herbarium, containing the plants described by Linnaeus in the "Hortus Cliffortianus" (1737) was bought by Banks in 1791.

See CLIFFORD.

Linton (EDWARD FRANCIS) [1848-] and WILLIAM RICHARDSON **Linton**.

Sets of British Rubi, Salices, and Hieracia, purchased 1892, etc.

Lister (ARTHUR). [1830-]

1,101 slides and 619 specimens, illustrating his Monograph of the Mycetozoa, presented 1894-1902; 110 British Mycetozoa with 36 coloured drawings, presented 1890.

Llewelyn (JOHN DILLWYN).

99 freshwater algae and 129 lichens, presented 1889.

Lobb (THOMAS). [*d.* 1894]

711 plants from Malasia, purchased 1846-48; 819 plants from the Eastern Archipelago, presented by H. J. Veitch, Esq., 1888; 400 plants from Borneo, purchased 1894.

Lobb (WILLIAM). [1809-63]

388 phanerogams and cryptogams from Western North America, purchased 1854.

Loftus (WILLIAM KENNETT). [c. 1821-58]

305 plants from Persia, Syria, etc., presented 1850-56.

Lojacono-Pojero (MICHELE). [1853-]

1,000 Sicilian plants, purchased at various dates from 1880.

Lojka (HUGO).

"Lichenes Hungarici," about 450 specimens (1873, etc.), purchased.

London (GEORGE). [d. 1713]

His herbarium (1673), consisting largely of cultivated plants, in Herb. Sloane.

Lord (JOB). [fl. 1704]

Carolina plants in Herb. Sloane.

Lorentz (PAUL GÜNTHER). [1835-81]

136 plants from Argentina, purchased 1878; mosses of Bavaria, etc. acquired with Herb. Hampe.

Loureiro (JUAN). [1715-96]

Sent in 1774, a small collection of Cochin-China plants to his friend Capt. Riddel, in the E.I.C. service, who presented them to Banks. See Journ. Bot., 1902, 389.

Lowe (RICHARD THOMAS). [1802-74]

68 plants of Mogador, presented 1859; part of his herbarium, containing a series of the typical plants of his "Manual Flora of Madeira," bequeathed by him 1875.

Lowne (BENJAMIN THOMPSON).

550 plants from Palestine, purchased 1864.

Ludwig (CHRISTIAN FRIEDRICH). [1757-1823]

"Kryptogamische Gewächse des Riesengebirge" (c. 1795), acquired with Herb. Shuttleworth in 1877.

Lund ().

228 plants from Finmark, etc., presented 1843.

Lunt (WILLIAM).

156 plants from Hadramaut, Arabia, presented by J. T. Bent, 1894.

Lyell (CHARLES). [1767-1849]

1,673 cryptogams from his herbarium, including his reference-set of British hepatics, presented 1898-99.

Lyle (THOMAS). [d. 1859]

Collection of mosses, acquired with Wilson's Herbarium.

Lynch (THOMAS KERR). [1818-91]

294 plants from Northern Persia, presented 1849.

Lyon (GEORGE JASPER). [1816-62?]

His herbarium, consisting of 2,542 cryptogams from various quarters, purchased 1862.

Mabille (JULES P.).

350 Corsican phanerogams, purchased 1872.

McArdle (DAVID).

250 Irish hepatics, purchased 1900.

Macarthur (*Sir* WILLIAM). [*fl.* 1848-63]

245 Australian plants, presented.

Macartney (*Lord*).

See STAUNTON.

Macbride (THOMAS H.).

62 specimens of North American Mycetozoa, acquired by exchange, 1892-94.

McCormick (ROBERT). [1800-90]

Collections formed during the Arctic and Antarctic expeditions, 1827-53, bequeathed by him.

MacGillivray (JOHN). [*d.* 1867]

795 plants from islands of the South Atlantic and Pacific Oceans, purchased 1855-63, and 218 from Brazil and the Atlantic islands, presented by the Admiralty, 1856.

Macgrigor (*Sir* JAMES). [*fl.* 1799-1829]

Mauritius plants collected about 1820.

MacIvor (WILLIAM GRAHAM). [*d.* 1876]

"Hepaticae Britannicae," containing 132 species, purchased 1847.

Macmillan (CONWAY). [1867-]

597 plants from Minnesota, acquired by exchange, 1896.

Macoun (JAMES MELVILLE). [1862-]

240 Canadian plants, presented 1896.

Macoun (JOHN). [1832-]

2,087 phanerogams and 1,875 collected during the Geological Survey of Canada, and presented at various dates from 1887.

MacOwan (PETER).

910 South African plants, presented 1875-76.

MacOwan (PETER), and HARRY Bolus.

A series of plants, forming their "Herbarium Austro-Africanum," acquired in 1885 and at various later dates.

Macrae (JAMES). [*fl.* 1823-30]

1,079 plants of Ceylon and 320 from the Sandwich Islands, purchased 1856.

MacRitchie (WILLIAM). [1754–1837]

Scottish plants from R. Brown's Herbarium, acquired 1876.

Macvicar (SYMERS M.).

178 of the rarer hepatics from Scotland, presented from time to time, 1899–1902.

Maiden (JOSEPH HENRY). [1859–]

372 plants, chiefly Australian, acquired by exchange, 1900–2.

Maingay (ALEXANDER CARROLL). [1836–69]

323 plants from Malaya, purchased 1871.

Malbranche (ALEXANDRE FRANÇOIS). [1818–88]

"Lichens de la Normandie" (1863), incomplete set of 100 specimens presented by the Council of the Linnean Society, 1896.

Malcolm (WILLIAM). [*fl.* 1778–1805]

Plants in Herb. Banks from his garden at Kensington.

Malinvaud (ERNEST).

63 critical species of *Mentha*, presented 1900.

Mandon (GILBERT). [1799–1866]

1,250 plants from Bolivia, purchased 1868, and 458 from Madeira, purchased 1873; mosses acquired with Herb. Bescherelle.

Mansel-Pleydell (JOHN CHARLES). [1817–1902]

191 plants from Uruguay, presented 1886, and numerous additions to the British Herbarium presented at various intervals.

Maries (CHARLES). [*d.* 1902]

209 Japanese plants, presented 1886; 420 plants from Gwalior, presented 1891.

Markham (*Sir* CLEMENTS ROBERT). [1830–]

Specimens of *Cinchona* from the Government plantation at Ootacamund, presented 1873.

Marschall von Bieberstein (FRIEDRICH AUGUST). [1768–1826]

Plants in Herb. Banks.

Marsden (WILLIAM). [1754–1836]

Plants from Sumatra in Herb. Banks.

Marshall (EDWARD SHEARBURN). [1858–]

A large series of specimens of critical British plants, presented at various intervals from 1888.

Martin (JOSEPH).

About 400 Guiana and Cayenne plants, purchased at Lambert's sale, 1842—"this collection was found in the French ship of war *L'Union*, a prize captured by two British privateers in 1803"; 772 Guiana plants, presented 1847.

Martius (KARL FRIEDRICH PHILIP VON). [1794-1868]

134 Brazilian plants, acquired 1841; mosses in Herb. Hampe.

Mason (NATHANIEL HASLOPE). [-1860?]

400 Madeira plants, purchased 1858.

Massee (GEORGE EDWARD). [1847-]

300 British fungi, presented 1891.

Masson (FRANCIS). [1741-1805]

Was sent to the Cape from Kew Gardens in 1772 at the instance of Banks, and subsequently on other collecting expeditions; his plants from all the localities visited are in Banks's Herbarium. He collected at the Cape in 1772-73 and again in 1786-95; in the Canaries and Azores, 1776-78; in the West Indies, 1779-80; in Spain and Portugal in 1783; in North Africa, 1783; and in North America and Canada (where he died) in 1797-1805. There is also in the Department a volume of his drawings, from which descriptions of several new species have been drawn up.

Masters (MAXWELL TYLDEN). [1833-]

A small collection of Indian grasses and Cyperaceae, with original drawings by the late Dr. Wight, presented 1875.

Mathews (ANDREW). [*d.* 1841]

Collections of Peruvian plants, purchased 1834 and 1840.

Maunsell (F. R.).

169 plants from Sivas, Asia Minor, presented 1898; 180 plants from Van, Armenia, presented 1901.

Maw (GEORGE). [1832-]

416 specimens of crocus with 72 specimens of corm-tunics, forming the collection illustrating his monograph of *Crocus*, presented 1885.

Maximowicz (CARL IVANOVITCH). [1827-91]

1,539 Japanese and Manchurian plants, acquired by exchange, 1885.

Maxwell (GEORGE).

300 plants of South-Western Australia, purchased 1861.

Mazé (HIPPOLYTE PIERRE). [1818-92]

1,509 marine algae, representing the species described in Mazé and Schramm's "Algues de la Guadeloupe," purchased 1887.

Meerseeven ().

Collection of Cape plants in Herb. Sloane, purchased 1757.

Meisner (KARL FRIEDRICH). [1800-74]

Plants from various localities, with notes, acquired with Herb. Shuttleworth.

Melville (JAMES COSMO). [1845-]

157 plants, mostly Australian, and 44 algae from Mauritius, presented at various dates from 1881.

Menzies (ARCHIBALD). [1754-1842]

Plants from western Coast of America and Pacific Islands in the Banksian Herbarium; another collection, which included the herbarium of John Zier, was acquired by exchange from New College, Edinburgh, 1886.

Merrett (CHRISTOPHER). [1614-95]

A large number of plants, mostly from English and foreign gardens, were purchased by Sloane and are in his herbarium.

Metz ().

2,300 plants from the Nilgherries, etc., purchased 1867.

Meyen (FRANZ JULIUS FERDINAND). [1804-1840]

Mosses and hepatics from Manilla, acquired with Herb. Hampe.

Miers (JOHN). [1789-1879]

His herbarium of phanerogams, containing the types of the species described in his numerous systematic works, together with an extensive series of South American plants collected by himself and others, supplemented by additions from other regions, with his original drawings and notes, bequeathed 1879. His fern herbarium, containing 2,006 species, was presented by his son, J. W. Miers, Esq., in 1887.

Migeod (J. W. H.).

123 plants from West Africa, presented 1898.

Migula (WALTER), PAUL **Sydow**, and LARS JOHAN **Wahlstedt**.

"Characeae exsiccatae," 150 specimens in 6 fascicles (1892-1901), purchased.

Miller (CHARLES). [1739-1817]

Sent plants from Sumatra to Banks in 1778.

Miller (O. O.).

266 plants from Margarita Island, Venezuela, purchased 1902.

Miller (PHILIP). [1691-1771]

His herbarium, consisting largely of plants cultivated in Chelsea Gardens, of which he was curator 1722-70, was bought by Banks in 1774 and incorporated in the Banksian collection; it contains the types of his "Gardeners Dictionary" and a large number of American plants from W. Houstoun. Other plants from Miller are in the Sloane Herbarium.

Milligan (JOSEPH). [1807-1883 ?]

529 Tasmanian plants, presented 1863-68.

Milne (WILLIAM GRANT). [*d.* 1866]

112 plants from Old Calabar, purchased 1866.

Mitchell (JOHN). [*d.* 1772]

Plants from Virginia in Herb. Banks.

Mitchell (*Sir* THOMAS LIVINGSTONE). [1792-1855]

485 plants from New South Wales, collected on an expedition into the interior and presented by him, 1847.

Montagne (JEAN FRANÇOIS CAMILLE). [1784-1866]

Many types of cryptogams acquired with the collections of Hampe, Wilson, Bescherelle, and others.

Moon (ALEXANDER). [*d.* 1825]

373 plants from Kandy, Ceylon, collected in 1819 and sent to Banks.

Moore (ALEXANDER GOODMAN). [1830-95]

179 British plants and a set of Irish hepaticae, presented at various dates from 1863.

Moore (CHARLES).

333 Australian plants, presented 1868.

Moore (DAVID). [1807-79]

Irish mosses, acquired with Herb. Wilson.

Moore (FREDERICK WILLIAM). [1857-]

Specimens of orchids cultivated in the Botanic Gardens, Dublin, presented at intervals from 1885.

Moore (SPENCER LE MARCHANT). [1850-]

1,100 plants from Matto Grosso, Brazil, including the types of his enumeration in *Trans. Linn. Soc., Ser. 2 (Bot.), iv, 265-516*, purchased 1894; 300 plants from Coolgardie, W. Australia, including the types of his enumeration in *Journ. Linn. Soc. (Bot.) xxxiv (1899)*, purchased.

Moore (THOMAS). [1821-87]

British Herbarium, presented by the Director of the Royal Gardens, Kew, 1887.

Moritz (KARL). [1796-1866]

2850 Venezuela plants, purchased 1865; mosses and hepatics acquired with Herb. Hampe.

Morong (THOMAS). [1827-94]

608 plants of Paraguay, purchased 1891-94.

Moseley (HARRIET). [*d.* 1867]

Herbarium of British plants, accompanying her collection of drawings, purchased 1886.

Mossman ().

108 phanerogams and 107 cryptogams of New Zealand, purchased 1850-51; 365 plants from King George's Sound, S. Australia, purchased 1860.

Mougeot (ANTOINE), CH. Manoury, L. Dupray, and CASIMIR Roumeguère.

"Algues de France," 13 centuries (1883-91), and 3 centuries of "Reliquiae Brebissonianae" (1886), purchased 1886-92.

Mougeot (JEAN BAPTISTE), [1776-1858], **J. ANTOINE Mougeot**,
CHRISTIAN GOTTFRIED **Nestler**, [1778-1832], and WILHELM
PHILIPP **Schimper** [1808-80].

"*Stirpes cryptogamae Vogeso-Rhenanae*," 1,500 specimens in 15 fascicles (1810-60), purchased 1873.

Mudd (WILLIAM). [1830-79]

"*Lichenes Britannici*" 300 specimens in 3 fascicles (1861), included in a purchase of 601 British lichens made in 1861; 80 specimens illustrating his "*Monograph of the British Cladoniae*," purchased 1865.

Mueller (*Sir* FERDINAND JAKOB HEINRICH VON). [1825-96]

4,220 plants from Australia and New Guinea, presented at various dates from 1863.

Mueller (KARL AUGUST FRIEDRICH WILHELM). [1818-99]

Many types of mosses, acquired with the herbaria of Hampe and Bescherelle.

Müller (WALTHER OTTO).

"*Cladoniaceen von Nord-Deutschland*," 50 specimens, purchased 1870.

Munby (GILES). [1813-76]

208 plants from Algeria, purchased 1850.

Murbeck (SVANTE SAMUEL). [1859-]

494 plants from North Africa, purchased 1898.

Murray (JOHANN ANDREAS). [1740-91]

A selection from his Herbarium, acquired 1872.

Murray (RICHARD PAGET). [1842-]

390 plants from Iberian Peninsula, purchased 1889; 400 from the Canaries, purchased 1898; 139 from the Canaries, presented 1900.

Mussin Puschkin (*Count* APOLLOS).

206 Caucasian Plants in Banksian Herbarium, received 1804.

Nadeaud ().

"*Mousses de Tahiti*," 81 specimens, purchased 1898.

Naegeli (KARL WILHELM VON). [1817-91]

300 specimens of *Hieracia*, purchased 1884.

Neger (F. W.).

"*Uredineae Austro-Americanæ*," 50 fungi, issued as a supplement to Sydow's "*Uredineen*," purchased 1897.

Nelson (DAVID). [*d.* 1789]

Australian, Cape, and Timor plants in Banksian Herbarium.

Nichol (E., *Mrs.*).

86 plants from the Falkland Islands, presented 1899.

Niven (JAMES). [1774?-1826]

South African plants in Banksian Herbarium.

Noe (WILHELM).

"Herbarium Noëanum" (eastern plants), acquired with Herb. Shuttleworth.

Nolte (ERNST FERDINAND). [1791-1875].

An extensive selection of plants from his herbarium, including specimens from Forskål, Cavanilles, Delile, Thuillier, Allioni, etc., a complete set of Fries' Herbarium Normale, and Hansen's plants of Schleswig-Holstein, purchased 1875 (*see* p. 104).

Nordstedt (CARL FREDRIK OTTO), [1838-] and **LARS JOHANN Wahlstedt.**

"Characeae Scandinaviae," 120 specimens in 3 fascicles (1871-74), purchased.

Norman (GEORGE). [1823-82]

155 microscope-preparations of Diatomaceae, purchased 1888, 1890.

Norrlin (J. P.) and WILLIAM Nylander.

"Herbarium Lichenum Fenniae," 450 specimens in 9 fascicles (1875-82), purchased 1875 and subsequently.

Nuttall (THOMAS). [1786-1859]

His herbarium containing 5,750 species, including types of the North American plants described in his works, purchased 1860.

Nylander (WILLIAM). [1822-99]

1,279 species of lichens, purchased 1874-79; these include his "Herbarium Lichenum Parisiensium," 150 specimens in 3 fascicles (1855-57), and a series of 78 from the Eastern Pyrenees (1872).

Nyman (CARL FREDRIK). [1820-93]

269 phanerogams and 100 mosses from Sweden, purchased 1865.

Oersted (ANDERS SANDOE). [1816-72]

Mosses of Costa Rica, acquired with Herb. Hampe.

Okamura (KINTARO).

"Algae Japonicae," 50 specimens, purchased 1899.

Oldenburg (). [*d.* 1774]

About 1,000 Cape plants, collected 1772, in the Banksian Herbarium.

Oldenland (HENRIK BERNHARD). [*fl.* 1737]

"Hortus siccus Capensis" sent to Petiver, and acquired by Sloane.

Oldham (GEORGE).

168 mosses from New Zealand, purchased 1862.

Oldham (RICHARD). [1837-64]

1,138 plants from Formosa, purchased 1866-70.

Olguin ().

309 plants from Kurdistan and Luristan, purchased 1854.

O'Meara (EUGENE). [c. 1815-80]

His collection of Diatomaceae, 1155 microscope-preparations, purchased 1882.

Ommaney (*Capt.* H. T.).

94 plants from Johannesburg, presented 1902.

Orcutt (CHARLES RUSSELL).

824 Californian plants, purchased 1885-87.

Orphanides (THEODOR GEORG). [1817-86]

1,042 Greek plants, purchased 1886-90.

Ortega (CASIMIRO GOMEZ). [1740-1818]

Plants in Banksian Herbarium, sent in 1777.

Oudemans (CORNELIUS ANTON JAN ABRAHAM).

"Fungi Neerlandici," 3 centuries (1875-79), purchased 1879-80.

Oudney (WALTER). [1790-1824]

See CLAPPERTON, HUGH.

Packman (J. D. V.).

260 plants from Tenasserim, presented 1844.

Painter (WILLIAM HUNT).

1,730 British plants, presented at various dates from 1882.

Pallas (PETER SIMON). [1741-1811]

His herbarium containing the types of Gmelin's Flora Sibirica and of Pallas's own publications; also specimens from Thunberg, Banks, Forster, Steller, Georgi, Merk, &c.; from 2,000 to 2,250 species, purchased at Lambert's sale, 1842.

Palmer (EDWARD). [1833-]

3,196 plants from New Mexico and California, purchased 1886-99.

Pancher (JEAN ARMAND ISIDORE).

880 plants from New Caledonia, purchased 1872.

Paris (EDOUARD GABRIEL).

500 plants from North Africa, purchased 1871-72.

Parish (SAMUEL B.).

578 Californian plants, purchased 1883-98.

Park (MUNGO). [1771-1805]

A small collection of African plants.

Parry (CHARLES CHRISTOPHER) [1823-90] and **GEORGE Vasey**
[1822-93]

1,962 Mexican plants, purchased 1882.

Parry (*Sir* WILLIAM EDWARD). [1790-1855]

Plants collected during his Arctic voyages, 1820.

Pavon (José).

South American plants acquired with Herb. Shuttleworth.
See also RUIZ AND PAVON.

Pearce (NATHANIEL). [c. 1780–1820]

A small collection of Abyssinian plants made 1809–19.

Pearce (RICHARD). [d. 1868]

2,275 plants from South America, purchased 1885.

Pearson (WILLIAM HENRY). [1849–]

His herbarium of hepatics, about 9000 specimens, including the types of his book on the "Hepaticae of the British Isles" and of his other memoirs, purchased 1902.

Percival (JOHN). [1863–]

Set of European cereals, purchased 1902.

Perrottet (GEORGE SAMUEL). [1793–1870]

481 plants from Senegal, 256 from the Nilgherries, and 52 from Guadeloupe, purchased 1862–67; mosses acquired with the collections of Hampe, Bescherelle, Stephani and Wilson.

Peters (ALBERT).

400 European Hieracia, purchased 1885–86.

Petiver (JAMES). [d. 1718]

His numerous and important botanical collections from many parts of the world, were purchased by Sloane and form part of his herbarium.

Philippi (RUDOLF AMANDUS). [1808–]

564 plants from Chili, purchased 1868.

Phillips (LORT, Mrs.).

451 specimens from Somali-land, presented 1897.

Phillips (WILLIAM). [1822–]

"Elvellacei Britannici," 201 specimens in 4 fascicles (1874–81), bequeathed by C. E. Broome, 1886.

Pichler (THOMAS).

300 species of Greek plants, purchased 1878.

Piggot (HORATIO).

2,383 specimens of British and foreign lichens, including Dr. Richard Deakin's herbarium, presented 1889; also 54 British fungi, presented 1890–92.

Pinard (C.).

Plants from Caria (1843), acquired with Herb. Shuttleworth.

Piré (LOUIS).

"Mousses de la Belgique," 50 specimens (1870), purchased 1899.

Pitcairn (WILLIAM). [1711–91]

Plants from his garden at Islington, in Herb. Banks.

Pittier (HENRI DE FÁBREGA).

117 plants from Costa Rica, purchased 1898.

Pittoni (GIUSEPPE C. DE).

132 plants from South Europe, presented 1869.

Plant (R. W.).

100 South African plants, purchased 1853-57.

Plowright (CHARLES BAGGE). [1849-]

"Sphaeriacei Britannici," 3 centuries of Fungi (1873-78), purchased. Also 86 British Fungi, presented at various times, 1884-99.

Plukenet (LEONARD). [1642-1706]

A folio volume, "Herbarium vivum" of cultivated plants. His principal collections are incorporated in the Sloane Herbarium.

Pocock (ROBERT). [1760-1830]

Herbarium of British plants, presented by his biographer, Mr. G. M. Arnold, 1884.

Poeppig (EDUARD FRIEDRICH). [1798-1868]

South American plants acquired with Herb. Shuttleworth; cryptogams with the collections of Hampe and Stephani.

Pohl (JOHANN EMMANUEL). [1782-1834]

Brazilian plants, some acquired with Brown's herbarium.

Polakowsky (HELLMUTH).

A set of his "Flora Costaricensis," purchased 1875.

Poore (DYKE, *Miss*).

117 marine algae from Jersey; purchased at various times, 1862-85.

Porta (PIETRO) [1852-] and **GREGORIO Rigo**. [1841-]

1,611 Spanish and Balearic plants, purchased 1880-92.

Post (GEORGE EDWARD).

1,655 Syrian plants, acquired 1878-1902.

Powell (THOMAS). [*d.* 1887]

154 Ferns and other cryptogams from Samoa, presented 1899.

Praeger (ROBERT LLOYD). [1865-]

480 British plants, purchased 1894.

Prain (DAVID). [1857-]

1,403 plants from the Calcutta Herbarium, acquired by exchange 1899-1902.

Pratt (ANTWERP E.).

771 plants from Szechuen and the Tibetan frontier, purchased 1891.

Prescott (JOHN D.). [*d.* 1837]

757 plants, mostly Russian, purchased 1861.

Presl (KAREL BORIWOĞ). [1794-1852]

A small set of his "Reliquiae Haenkeanae" acquired with Herb. Shuttleworth.

Preston (THOMAS ARTHUR). [1833-]

294 British plants, presented 1887-88.

Prichard (H. HESKETH).

130 plants from Patagonia, presented 1902.

Priestley (Sir WILLIAM OVEREND). [1829-1900]

A collection of British Carices, with the parts of the inflorescence and fruit carefully dissected and drawn, presented 1889.

Pringle (CYRUS GUERNSEY). [1838-]

3,435 Mexican plants, purchased at various dates from 1886.

Prior (RICHARD CHANDLER ALEXANDER). [1809-1902]

994 plants from Styria, Dalmatia, and Italy, and a large number of South African plants, presented 1868.

Pritzel (ERNST).

1,015 plants from West Australia, purchased 1901-2.

Puccinelli (BENEDETTO). [1808-50]

588 Italian plants, purchased 1868.

Pulteney (RICHARD). [1730-1801]

Herbarium of British plants, purchased 1863.

Rabenhorst (GOTTLÖB LUDWIG). [1806-81]

His published sets: "Algen Sachsens" and "Algen Europas," about 2,600 specimens in 259 decades (1848-79); "Klotschii Herb. Mycolog. Ed. II," 800 specimens in 8 fascicles (1855-58); "Fungi Europaei," 43 centuries (1859-79), continued by Winter, and subsequently by Pazschke; "Cryptogamae vasculares Europaeae," 160 specimens in 5 fascicles (1858-72); "Bryotheca Europaea," 1,450 mosses in 29 fascicles (1858-84), completed by Winter; "Hepaticae Europaeae," 66 decades (1856-79), published by collaboration with Gottsche; "Lichenes Europaei," 974 specimens in 36 fascicles (1855-79); "Characeen Europas," 121 specimens in 5 fascicles (1857-78), published by collaboration with Al. Braun and Stizenberger; "Diatomaceae exsicc. totius terrarum orbis," 100 specimens (1871); "Lichenes Chinesens," 36 specimens (1873). These were purchased at various dates from 1862.

Ralfs (JOHN). [1807-90]

"British Algae," 40 specimens published c. 1850; his microscope preparations of algae, 3,137 slides, presented by his son in 1890; his herbarium of cryptogams containing 1,968 specimens, purchased 1892.

Ralph (THOMAS SHEARMAN). [1892?]

167 plants from New Zealand, purchased 1854-59.

Ramage (G. A.).

172 plants from Brazil, purchased 1888; 485 plants from Dominica, presented by the Council of the Royal Society.

Rand (ISAAC). [d. 1743]

His herbarium, presented by the Apothecaries' Company, 1862, from which selections were made for the British collection.

Rand (RICHARD FRANK). [1856-]

988 plants from South Africa, presented 1893-1902.

Ravenel (HENRY WILLIAM). [1814-87]

"Fungi Caroliniani," 5 centuries (1852-60); "Fungi Americani," 8 centuries (1877-82); his herbarium, consisting of 14,550 cryptogams, amongst which are the types of 152 new species, was purchased in 1891.

Rawson (Sir RAWSON WILLIAM). [1812-99]

2,000 South African and West Indian ferns, purchased 1900.

Ray (JOHN). [1627-1705]

His herbarium of European plants, presented by the Apothecaries' Company, 1862.

Reed (EDWYN C.).

773 plants from Chili, purchased 1875.

Regel (ALBERT). [1815-92]

663 Turkestan plants, acquired by exchange, 1885.

Rehm (HEINRICH).

"Ascomycetes exsiccatae," 1,450 Fungi in 29 fascicles, in progress since 1874, purchased.

Rehmann (ANTON).

2,176 phanerogams and 1,293 cryptogams from South Africa, purchased 1881-90. 191 plants from Cherson, purchased 1872.

Rehmann (ANTON) and Woloszczak (EUSTACHE).

"Flora Polonica exsiccata" (900 species), purchased 1895-1902.

Reichenbach (HEINRICH GOTTLIEB LUDWIG). [1793-1879]

"Florae Germaniae exsiccata" (phanerogams and cryptogams), purchased.

Reichenbach (H. G. L.) and C. Schubert.

"Lichenes exsiccati," 125 specimens in 5 fascicles (1822-24), incomplete, purchased 1899.

Reichenbach (HEINRICH GUSTAV). [1823-89]

107 Orchideae, presented 1876.

Reid (CLEMENT). [1853-]

393 specimens of fruits of British plants, presented 1885-1902.

Reinsch (PAUL FRIEDRICH).

59 microscope-preparations of algae from the Cape and Kerguelen's Land, purchased 1876.

Renauld (FERDINAND) and JULES Cardot.

"Musci Americae septentrionalis," 350 specimens in 7 fascicles (1892-1901), purchased.

Renous ().

175 plants of Chili, purchased 1844.

Requien (ESPRIT). [1788-1851]

Set of his Corsican plants, purchased.

Reuter (GEORGES FRANÇOIS). [1815-72]

Spanish plants acquired with Herb. Shuttleworth.

Richardson (Sir JOHN). [1787-1865]

1,919 plants of North America, including types described in Hooker's "Flora Boreali-Americana," presented by the Lords of the Admiralty 1856.

Richardson (RICHARD). [1663-1741]

Plants in Herb. Sloane.

Ridley (HENRY NICHOLAS). [1855-]

750 plants from Pernambuco, presented 1887; 200 from Fernando Noronha, presented by the Royal Society; 8,618 plants and 428 woods from Malasia, presented at various dates from 1889.

Robb (Dr.).

100 Calabar plants, purchased 1870.

Robertson (JAMES).

Plants from Johanna Island, Bombay, Madras, China, and St. Jago, sent to Banks 1772-76.

Robertson (JAMES).

194 plants from Honduras, purchased 1890.

Robinson (BENJAMIN LINCOLN).

205 North American plants, presented 1895-1902.

Robinson (Mrs.). [d. 1847]

Herbarium of British plants, bequeathed 1847.

Roemer (JOHANN JAKOB). [1763-1819]

His herbarium, containing many types of Roemer and Schultes's "Systema Vegetabilium," acquired with Herb. Shuttleworth.

Rogers (WILLIAM MOYLE). [1835-]

617 specimens of South African plants, presented 1885; 65 specimens of Rubi, presented 1898.

Rohr (JULIUS PHILIPP BENJAMIN VON). [1737-93?]

West Indian plants in Herb. Banks.

Romain (CH.).

966 Algerian plants, purchased 1868.

- Romell** (LARS). [1854-]
 "Fungi exsiccati praesertim Scandinavici," 2 centuries (1890 and 1895), purchased 1896.
- Roper** (FREEMAN CLARKE SAMUEL). [1819-96]
 151 British plants, presented 1881-90; 538 American plants, presented 1883; collection of diatoms, consisting of 3,580 slides, bequeathed 1896.
- Rosendahl** (C. O.) and **CARL J. Brand**.
 100 plants from Vancouver Island, purchased 1902.
- Rossmässler** (E. A.). [1806-67]
 166 plants from Spain, purchased 1856.
- Rostan** (EDOUARD). [1835-95]
 650 European plants, purchased 1869.
- Rothery** (HENRY CADOGAN).
 247 Guiana plants, presented 1845.
- Roxas** (CLEMENTE Y RUBIO SIMON) [1777-1827] and **Leblech**.
 Plantas de Andalucia, 1803, acquired with Herb. Shuttleworth.
- Roxburgh** (JOHN). [*Jl.* 1809]
 Plants from the Cape.
- Roxburgh** (WILLIAM). [1751-1815]
 Large collections from various parts of India and plants from St. Helena in the Banksian Herbarium; others acquired with Herb. Shuttleworth.
- Royen** (ADRIAN VON). [1705-79]
 Plants from East Indies in Herb. Banks.
- Roze** (ERNEST) [1833-1900] and **ÉMILE Bescherelle**.
 "Muscineés des environs de Paris," 250 specimens in 10 fascicles (1861-66), purchased 1883.
- Rudbeck** (OLOF). [1660-1740]
 Plants from Lapland in Herb. Sloane.
- Rudge** (EDWARD). [1763-1846]
 Arranged general herbarium of 4,138 species and 772 plants from Guiana collected by Martin, including many types described by Rudge, presented by Mrs. Rudge, 1847.
- Rugel** (FERDINAND). [1806-79]
 240 plants from south Europe, purchased 1874; a large collection of Florida plants, containing numerous types, forming part of the Shuttleworth herbarium, purchased 1877.
- Ruiz** (LOPEZ HIPOLITO) [1754-1815] and **José Pavon**.
 Herbarium containing 1,500-1,750 species, with a separate collection of fruits and of Cinchona barks, and the original MSS. relating to their travels in 1777-1788, purchased at Lambert's sale, 1842.

Rusby (HENRY HURD).

1,435 South American plants, purchased 1888-96.

Russell (ALEXANDER [d. 1768] and PATRICK [1726-1805])

A large collection of plants from Aleppo in the Banksian Herbarium, the types of the descriptions (by Banks and Solander) in the "Natural History of Aleppo," ed. 2, ii. 237-271 (1794).

Ruysch (FREDERICK). [1638-1731]

Herbarium formed in Holland about 1657, in Herb. Sloane.

Ryan (JOHN). [fl. 1797]

West Indian plants in Herb. Banks.

Sabbati (LIBERATO). [b. 1714]

Herbarium in two folio volumes, dated 1768, transferred from the Department of MSS., 1871.

Sabine (Sir EDWARD). [1788-1883]

Plants collected in Arctic expeditions, 1818-20, from Herb. R. Brown, Herb. R. Forster, etc.

Saccardo (DOMENICO). [1872-]

"Mycotheca Italica," containing 12 centuries of Fungi (1898-1903), purchased.

Saccardo (PIER' ANDREA). [1845-]

"Mycotheca Veneta," 1600 specimens in 16 centuries (1874-81), purchased in 1875 and subsequently.

Sadler (JOHN). [1837-1882]

360 British mosses and 150 lichens, purchased 1861.

Sagot (PAUL ANTOINE). [1821-89]

954 plants from French Guiana, purchased 1868.

Sagra (RAMON DE LA). [1798-1871]

110 plants from Cuba, purchased 1872.

Salisbury (RICHARD ANTHONY). [1761-1829]

Plants from his garden at Chapel Allerton, in Herb. Banks.

Sallé (CHARLES).

1,143 plants from Mexico, New Orleans, etc., purchased 1855-58.

Salt (HENRY). [1785?-1827]

Collection of Abyssinian plants presented to Banks; list by Robert Brown in appendix to Salt's "Voyage to Abyssinia," 1814.

Salvador y Riera (JUAN). [1683-1726]

Plants from the Balearic Islands (1711-12), in Herb. Sloane.

Salwey (THOMAS). [d. 1878]

4 centuries of British lichens, issued under the title, "Lichenes centum ex herbario T. Salwey," purchased at intervals, 1860-62.

Sartwell (HENRY PARKER).

213 Carices of North America, purchased 1869.

Saunders (JAMES). [1839-]

147 phanerogams and 192 mosses, mostly from Bedfordshire, acquired 1882-99.

Saunders (WILLIAM WILSON). [1809-79]

A large collection of plants, purchased 1874.

Sauter (ANTON ELEUTHERIUS). [1800-81]

Muscineae of the Eastern Alps, acquired with Herb. Hampe.

Schaerer (LUDWIG EMANUEL). [1785-1853]

"Lichenes Helvetici," 650 specimens in 26 fascicles (1823-52), purchased 1874; a second edition was acquired with Herb. Shuttleworth.

Schaffner (S. WILHELM).

483 Mexican plants, purchased 1884.

Scheffer (RUDOLPH HERMAN CHRISTIAN CAREL). [1844-80]

276 woods from Java, presented 1872.

Scheuchzer (JOHANN JAKOB). [1672-1733]

Grasses and other plants in Herb. Sloane.

Schiede (CHRISTIAN JULIUS WILHELM) [*d.* 1836] and FRIEDRICH Deppe.

A set of their Mexican collections.

Schiffner (VICTOR FELIX). [1852-]

113 hepatics from the Malay Archipelago, purchased 1898.

Schimper (WILHELM). [1804-78]

828 Abyssinian and Arabian plants, purchased at various dates from 1841; 2000 Abyssinian plants, including all the types of his "1863-68" collection, purchased 1869.

Schimper (WILHELM PHILIPP). [1808-80]

"Musci Europaei," 500 specimens (1840), purchased 1844; his "Pugillus Muscorum Europaeorum," 273 specimens, purchased 1865.

Schinz (HANS). [1858-]

456 plants from various localities, chiefly South African, acquired by exchange, 1893-1902.

Schlagintweit, THE BROTHERS.

2,050 plants from the Himalayas and Tibet, purchased 1886, 1900.

Schlechter (FRIEDRICH REICHARDT RUDOLPH). [1872-]

3,317 South African plants, purchased at various dates from 1893.

Schleicher (J. C.).

Published centuries of Swiss plants, acquired with Herb. Shuttleworth.

Schlimm (LOUIS).

465 plants from New Granada, purchased 1862.

Schmitz (FRIEDRICH). [1850-95]

His collection of 7,457 microscope preparations of marine algae, being the types of his Florideae as classified in Engler and Prantl's "Pflanzenfamilien," purchased 1899.

Schomburgk (SIR ROBERT HERMANN). [1804-65]

2,341 plants from British Guiana, presented at various dates from 1836.

Schönland (SELMAR). [1860-]

251 plants from South Africa, presented 1901-2.

Schott (ARTHUR CARL VICTOR). [1814-75]

1,000 plants collected in Yucatan in 1865, purchased 1871.

Schousboe (PETER KOFOD ANKER). [1766-1832]

497 "Algae Schousboeanae," mostly from Tangier, collected by Schousboe and edited by Kralik and others, purchased 1883; 92 phanerogams from Morocco, purchased 1873.

Schrenk (ALEXANDER GUSTAV). [1816-76]

151 plants of Dzungaria, purchased 1880.

Schultz (FRIEDRICH WILHELM). [1804-76]

"Flora Germanica et Galliae" (1836-53), continued as "Herbarium Normale" (1856-), purchased at various dates.

Schultz (KARL HEINRICH, *Bipontinus*). [1805-67]

1,226 Compositae, purchased 1863-72.

Schumann (WALTHER).

208 Mexican plants, purchased 1889.

Schwanecke (CARL). [1821-]

Mosses of Porto Rico, acquired with Herb. Hampe.

Schweinfurth (GEORG AUGUST). [1836-]

1,494 plants from East Africa and Arabia, purchased at various dates from 1867; Tirolese plants, collected 1857, acquired with Herb. Shuttleworth.

Scortechini (BENEDETTO). [1845-86]

237 phanerogams and ferns from Perak, presented 1884-86.

Seemann (BERTHOLD CARL). [1825-71]

450 plants from the South Sea Islands, etc., collected during the voyage of H.M.S. *Herald* (1852), and presented by Sir J. Liddell, C.B.; 594 plants of Fiji ("Plantae Vitienses"), purchased 1861; and upwards of 2,000 species from Eskimo-land, Panama, Mexico and Hongkong, being the types of "Botany of the Voyage of H.M.S. *Herald*," purchased 1862; 238 plants from Nicaragua, purchased 1867.

Sello or Sellow (FRIEDRICH).

Brazilian plants collected 1815-17; others acquired with Herb. Shuttleworth, etc.

Sendtner (OTTO). [1814-59]

Austrian and Dalmatian Muscineae.

Seringe (NICOLAS CHARLES). [1776-1858]

"Mousses Helvétiques," edition i with 8 decades (1804-6), and edition ii with 100 specimens (1809); series of *Viola*, with printed tickets and notes; acquired with Herb. Shuttleworth.

Seymour (ARTHUR BLISS) and F. S. **Earle**.

"Economic Fungi," 590 specimens in 11 fascicles with supplement (1890-99), purchased.

Shakespear (ROGER).

Plants from Jamaica and South America, collected 1777-82, in Herb. Banks.

Sharpe (DANIEL). [1806-56]

105 plants from Portugal, purchased 1871.

Shaw (G.).

144 Madagascar ferns, purchased 1880.

Sherard (WILLIAM). [1659-1728]

Plants in Herb. Sloane.

Sherring (RICHARD VOWEL).

Collection of ferns from the island of Grenada, presented by the West India Exploration Committee, 1891.

Shockley (W. H.).

134 plants from North China, presented 1900; 180 plants from Siberia, presented 1901.

Shoolbred (WILLIAM ANDREW). [1852-]

204 British plants, presented 1895-98.

Short (CHARLES WILKINS) [1794-1863]

406 plants from Kentucky collected by him, and presented by Sir John Richardson, 1860.

Shuttleworth (ROBERT JAMES). [1810-74]

His extensive herbarium, purchased 1877; for contents, see p. 105.

Sibthorp (JOHN). [1758-96]

Plants from Greece in Herb. Banks.

Sieber (FRANZ WILHELM). [1789-1844]

Plants from New Holland, Crete, and Martinique, purchased 1872.

Siehe (WALTER).

842 plants from Asia Minor, purchased 1897-99.

Simons (F. A. A.).

82 East African plants, purchased 1877; 206 South American plants, purchased 1879-81.

Sinclair (ANDREW). [*d.* 1861]

600 New Zealand plants, purchased 1858.

Sintenis (PAUL).

500 European cryptogams, purchased 1882; 2,077 Oriental plants, purchased 1884-1902; 2,499 plants from Porto Rico, purchased 1899-1900.

Small (JOHN KUNKEL). [1869-]

52 "Mosses of the Southern United States," and 58 "Lichens of North America," purchased 1898.

Smeathman (HENRY). [*f.* 1750-87]

Plants from Sierra Leone and West Indies in Herb. Banks.

Smith (A. DONALDSON).

456 plants from East Tropical Africa, presented 1895 and 1900.

Smith (ANNIE LORRAIN, *Miss*). [1854-]

271 British marine algae and 112 slides, presented 1892-94; 84 specimens and 78 microscope-preparations of British micro-fungi, purchased at intervals from 1894 to 1903.

Smith (CHRISTOPHER). [*d.* 1806 ?]

Plants collected (with James Wiles) on Bligh's voyage to Otaheite, 1791-93; and plants and drawings from the Moluccas, 1796-1805, in Herb. Banks.

Smith (CHRISTIAN). [1785-1816]

Plants from Madeira, Teneriffe, etc. (1815), and the Congo (1816), described by R. Brown in the Appendix to Tuckey's "Narrative of Expedition to River Zaire," 1818.

Smith (HAMILTON L.).

"Species typicae Diatomacearum," 750 preparations for the microscope, purchased 1888.

Smith (HERBERT H.) and GEORGE WHITFIELD **Smith**. [1860-]

635 plants from St. Vincent, collected by them, and presented by the West India Exploration Committee, 1891.

Smith (*Sir* JAMES EDWARD). [1759-1828]

Plants in Herb. Banks from the Linnean Herbarium acquired by exchange with Banks.

Smith (JOHN). [1798-1888]

His herbarium, containing upwards of 10,000 ferns and a large collection of flowering plants, chiefly garden specimens, purchased 1865-66.

Smith (JOHN DONNELL). [1829-]

670 plants from Guatemala, presented 1900.

Smith (W. E.).

110 plants from Orkney and Shetland, presented 1884.

Smith (WILLIAM). [1808-57]

His collection of Diatomaceae, comprising 729 slides and 512 diatomaceous earths.

Smith (WORTHINGTON GEORGE). [1835-]

304 species of British Fungi, purchased 1871; and 47 Fungi and 216 microscope-preparations, acquired at various times, 1877-99.

Societas Unitatis Fratrum (MORAVIAN BRETHERN).

About 500 specimens sent to Banks from Tranquebar, 1775, 1778. See Journ. Bot. 1902, 388.

Soleirol ().

635 Corsican plants, purchased 1858.

Solms-Laubach (HERMANN Graf zu). [1842-]

Algarvian mosses (1866), acquired with Herb. Hampe.

Somerset (MARY), née Capel, Duchess of BEAUFORT. [1630?-1714]

Plants from her garden at Badminton in Herb. Sloane.

Sowerby (JAMES). [1757-1822]

His herbarium containing the types of the plants figured in "English Botany," purchased 1859; models of 168 British Fungi, made by Sowerby during the preparation of his book on "English Fungi," purchased 1844. A Guide to Sowerby's Models, written by Mr. Worthington G. Smith, has been published by the Department.

Spegazzini (CARLO). [1858-]

"Decades Mycologicae Italianae," 120 fungi (1879), purchased 1880, and "Hongos Sud-Americanos," 5 decades of Argentine fungi (1881), purchased 1882.

Spruce (RICHARD). [1817-93]

408 mosses and hepatics from the Pyrenees, purchased 1847; 4,235 phanerogams and 2,467 cryptogams from the Amazons and Andes, purchased at various dates from 1851; 850 plants from the Tirol, purchased 1866.

Statter (JOHN WHEWELL). [1829-96]

980 specimens of Australian and British plants, presented 1902.

Staunton (Sir GEORGE LEONARD). [1737-1801]

A large collection of plants made during Lord Macartney's embassy to China, 1793, and sent to Banks.

Stenfort (F.).

"Algues marines," 48 French Algae with text (1874), purchased.

Stenhammar (CHRISTIAN). [1783-1866]

"Lichenes Sueciae exsiccati," edition ii, 240 specimens in 8 fascicles (1860-65), presented by the Council of the Linnean Society in 1896.

Stephani (FRANZ).

11,920 hepatics, being a series of co-types from his herbarium and illustrating his numerous memoirs, purchased 1895, 1896.

Stewart (JAMES).

162 plants from Zambesi, purchased 1863.

Strachey (Sir RICHARD) and JAMES EDWARD Winterbottom
[1803-54].

Himalayan herbarium (1,747 species), presented by the East India Company, 1852.

Stfibřny (V.)

551 plants from Bulgaria, purchased 1894-1902.

Strickland (Lieut. WALTER).

118 plants from West Africa and the Sandwich Islands, presented 1850.

Strickland (W. W.).

202 British and 84 foreign fungi, presented at various times, 1888-1895.

Sturt (CHARLES). [1796-1869]

Australian plants, acquired with Brown's herbarium.

Suksdorf (WILHELM N.).

674 plants from Washington Territory, purchased 1882-84, and 208 from Colorado, purchased 1886.

Sullivant (WILLIAM STARLING). [1803-73]

"Musci Alleghanienses," containing 215 mosses and 77 hepatics, acquired with Herb. Shuttleworth in 1877; numerous specimens communicated by him to Wilson and to Hampe are now incorporated in the general collection; "Musci Boreali-Americani," edition ii, prepared by Sullivant and Lesquereux, 536 specimens, purchased 1866.

Swartz (OLOF). [1760-1818]

Plants (mostly from West Indies) in Herb. Banks; Swartz worked in the Banksian Herbarium in 1786. *See* Journ. Bot. 1897, 20.

Sydow (PAUL).

"Mycotheca Marchica," 49 centuries of German fungi (1888-99), purchased (century i was published by Zopf and Sydow); "Uredineen," 1,650 fungi in 33 fascicles (1888, &c.), purchased; "Ustilagineen," 300 fungi in 6 fascicles (1894, &c.), purchased; "Phycomyceten und Protomyceten," 200 fungi in 4 fascicles (1897, &c.), purchased.

Tate (RALPH). [1840-1901]

269 plants from the Shetland Islands, purchased 1865; 323 plants from Nicaragua, purchased 1869.

Taylor (JAMES).

100 plants from Davis Strait, purchased 1861.

Taylor (THOMAS). [d. 1848]

Numerous types of mosses, hepatics and lichens, acquired with Herb. Wilson, 1873.

Taylor (W. E.)

1922 plants from East Tropical Africa, presented at intervals between 1882 and 1888.

Tedlie (HENRY). [1792?-1818?]

Plants collected during Bowdich's mission to Ashantee; list on pp. 470-74 of the published account of the mission.

Tempère (J.)

"Genera des Diatomées," 150 microscope-slides in 6 sets (1888-1900), acquired with the Deby collection in 1893.

Tempère (J.) & Dutertre (E.).

"Champignons de France," 250 microscope-slides in 10 sets (1892-93), purchased.

Tempère (J.) & Peragallo (H.).

"Diatomées du monde entier," 625 microscope-slides in 25 sets (1889-95), acquired with the Deby collection in 1893.

Tempère (J.) & Petit (PAUL).

"Diatomées de France" (continued by Tempère & Peragallo), 400 microscope-slides (1887-1900), acquired with the Deby collection in 1893.

Tenore (MICHELE). [1780-1861]

Italian plants, acquired with Herb. Shuttleworth.

Thedenius (KNUT FREDRIK). [1814-94]

"Musci Sueciae," fascicles 6 and 7 (1839), forming a continuation of the set published by Sv. Joh. Lindgren, and subsequently completed by Sillen, acquired with Herb. Hampe.

Thomas (EMMANUEL) [1788-1859] and PHILIPPE Thomas.
[*d.* 1831]

Plants collected in Switzerland, Corsica and Sardinia, acquired with Herb. Shuttleworth.

Thompson (JOHN VAUGHAN). [*fl.* 1807-29]

Plants from Madagascar.

Thomson (THOMAS). [1817-78]

Indian plants.

See HOOKER and THOMSON.

Threde (H. C.).

"Algen der Nordsee," 100 specimens in 5 parts (1832-34), acquired with Herb. Shuttleworth.

Thümen (Baron FELIX CHARLES VON). [1839-92]

"Fungi Austriaci," 1,300 specimens in centuries (1871-75); "Mycotheca Universalis," 2,300 fungi in centuries (1875-84); "Pilze des Weinstockes," 25 fungi (1878): purchased at various times, 1872-84.

Thunberg (CARL PEHR). [1743-1822]

Plants from Japan and the Cape in Herb. Banks.

Thurn (EVERARD FERDINAND IM).

315 plants from Roraima, presented 1885.

Thurston (EDGAR).

131 Indian marine algae, presented 1889, 1900.

Thwaites (GEORGE HENRY KENDRICK). [1811-62]

2,861 specimens of Ceylon plants.

Tilden (JOSEPHINE E.).

"American Algae," 6 centuries, purchased.

Tindall (ELLA M., *Mrs*). [1850-]

267 microscope-preparations of British hepatics, acquired by exchange, 1894, 1895.

Tiselius (GUSTAV AUGUST). [1833-]

"Potamogetones Suecici exsiccati," purchased 1895-97.

Todaro (AGOSTINO). [1818-92]

Set of Sicilian plants, purchased at various intervals.

Tonduz (ADOLPHE).

878 plants from Costa Rica, purchased 1899-1902.

Tournefort (JOSEPH PITTON DE). [1656-1708]

Collection from the Levant made about 1702; other collections in Herb. Banks.

Tracy (S. M.).

1,513 plants from Southern United States, purchased 1901-2.

Trail (JAMES WILLIAM HELENUS). [1851-]

160 palms from the Amazons, presented 1876.

Trevor-Battye (AUBYN BERNARD ROCHFORD).

94 plants from Kolguev, presented 1895.

Triana (JOSÉ JERONIMO). [1828-90]

Herbarium of New Grenada plants, containing 4,490 species, purchased 1891.

Trimen (HENRY). [1843-96]

Herbarium of British plants (about 3,000 sheets), presented in 1873, and specimens from Ceylon, etc., presented at various times.

Trimen (ROLAND). [1840-]

192 plants from the Cape, presented 1871.

Tuckerman (EDWARD). [1817-86]

20 forms of Potamogeton from Northern United States, presented 1849; "Lichenes Americae Septentrionalis," 150 specimens in 6 fascicles (1848-54), purchased 1875; 82 plants of New England, purchased 1875.

Tullidelph (WALTER).

Plants from Antigua, collected 1729, in Herb. Sloane.

Tweedie (JAMES). [1775-1862]

A collection of Buenos Ayres plants, purchased 1846.

Tyrrel (J. BURR).

125 plants from Klondike, presented 1900.

Tyson (WILLIAM).

401 algae from Cape Colony, presented from time to time, 1891-96.

Ulef (ERNESTO).

"Bryotheca Brasiliensis," 2 centuries, purchased in 1891 and 1895;
"Herbarium Brasiliense," 445 cryptogams, purchased 1899.

United States Exploring Expedition. [1853-56]

106 lichens from the North Pacific, acquired by exchange 1899.

Uvedale (ROBERT). [1642-1722]

Plants from his garden at Enfield in Herb. Sloane.

Vahl (JENS LORENZ MUESTUE). [1796-1854]

Plants from Iceland, Greenland, etc., acquired with Nolte's herbarium.

Vaillant (SÉBASTIEN). [1669-1722]

Plants from the Paris Garden in Herb. Banks.

Van Heurck (HENRI).

400 Belgian plants, purchased 1864-70; "Types du Synopsis des Diatomées de Belgique," 550 microscope-slides in 22 series (1882-85), purchased.

Veitch (HARRY JAMES). [1840-]

140 plants from Juan Fernandez, S. America, and Java from various collectors, presented 1877; 40 plants from Costa Rica, presented 1872; species of *Nepenthes*, presented 1876 and 1878.

Veitch (JAMES HERBERT).

138 plants from West Australia and 72 from Korea, presented 1893.

Vere (JAMES). [*fl.* 1798]

Plants from his garden at Paddington in Herb. Banks.

Vernon (WILLIAM). [*fl.* 1688]

Plants from East Indies and Maryland in Herb. Sloane.

Vestergren (TYCHO).

"Micromycetes rariores selecti praecipue Scandinavici," 625 specimens in 25 fascicles (1899, etc.), purchased.

Vieillard (EUGÈNE DEPLANCHE ÉMILE). [1824-75]

256 plants from New Caledonia, purchased 1873.

Vienna, K.K. Naturhist. Hofmuseum.

"Kryptogamae exsiccatae," 8 centuries (1894-1902), acquired by exchange.

Vize (JOHN EDWARD).

"Fungi Britannici," 2 centuries (1873, 1875), bequeathed by C. E. Broome, 1887; "Micro-fungi Britannici," fascicles iv-vi, 300 specimens, acquired 1899; "Micro-fungi exotici," 40 specimens (1883), acquired 1887.

Vogel (EDUARD). [1829-56]

144 plants from Tripoli and Bornou, presented 1856.

Volkens (W.).

1,173 plants and 68 woods from Kilimanjaro, etc., purchased 1895.

Waghorne (ARTHUR CHARLES).

699 mosses, 597 lichens and 166 fungi of Newfoundland and Labrador, purchased at various times, 1893-99.

Wagner (HERMANN).

"Cryptogamen-Herbarium," 125 specimens in 5 parts (1854-55); second series, 100 specimens in 4 parts (1854-62), bequeathed by C. E. Broome in 1886.

Wagner (J.).

160 plants from the East, purchased 1894.

Wahlenberg (GÖRAN). [1780-1851]

Lapland plants acquired with Herb. Shuttleworth; Norwegian plants in Herb. Banks.

Wainio (EDVARD AUGUST).

565 "Lichenes Brasilienses," purchased 1892.

Walker (*Lieut.-Col.* GEORGE WARREN). [*d.* 1844]

305 plants from Singapore and Penang, presented 1862.

Wallace (ALFRED RUSSEL).

Ferns collected in Borneo, 1863.

Wallich (NATHANIEL), *olim* NATHAN Wolff. [1786-1854]

A collection of East Indian and Malayan plants, presented by the East India Company at dates from 1829 to 1849; 595 South African plants, presented 1844.

Wallis (GUSTAV). [*d.* 1878]

Muscineae from the Philippines (1870) and New Granada (1871-75), acquired with the Hampe and Stephani collections.

Walter (THOMAS). [1740 ?-83]

His herbarium (1786-88) containing many of the plants described in his "Flora Caroliniana" (1788): it was presented by him to John Fraser, whose son gave it to the Linnean Society in 1849, and it was purchased for the Department at the sale of the Society's surplus collections in 1863.

Ward (NATHANIEL BAGSHAW). [1791-1868]

Collections from his executors, 1869, *see* p. 99.

Warnstorf (CARL).

"Europäische Torfmoose," series i-iv (1888-1894), 238 specimens, purchased 1900; "Deutschlands Lebermoose," 93 specimens (c. 1880), purchased.

Warren (JOHN B. L.).

See DE TABLEY.

Wartmann (BERNHARD) [1830-1902] and B. Schenk.

"Schweizerische Kryptogamen," 700 specimens in 14 fascicles (1862-69), purchased 1872 and 1896; also centuries viii and ix (1880, 1882), edited by B. Wartmann and G. Winter, purchased 1896.

Watt (GEORGE). [1851-]

74 species of Indian plants, presented 1886; Diatomaceae and other fresh-water algae collected by him in the Manipur expedition, presented 1887.

Weale (JAMES PHILIP MANSEL).

Asclepiadaceae and Orchidaceae from Cape Colony, presented 1877.

Weathers (JOHN). [1867-]

545 specimens and sketches of orchids, purchased 1897.

Webb (PHILIP BARKER). [1773-1854]

298 Canarian plants, presented 1844-45.

Webster (LEONARD).

270 plants from West Australia, purchased 1902.

Weddell (HUGH ALGERNON). [1819-77]

213 lichens from his herbarium, presented 1874.

Weir (JOHN). [d. 1898]

390 mosses, chiefly South American, purchased 1871; 64 lichens and 74 New Granadan, and 51 Brazilian phanerogams, purchased 1872; also plants from Miers's herbarium.

Welwitsch (FRIEDRICH MARTIN JOSEF). [1806-72]

1701 Portuguese plants, purchased 1848-58.

The second set of his collections in Angola, etc., was acquired by the Trustees in 1876, in accordance with a decision of the Court of Chancery. These specimens are the types for the Catalogue of his plants prepared in the Herbarium by Mr. W. P. Hiern, Dr. Rendle, and other botanists, and issued by the Trustees in 1896-1901.

West (WILLIAM). [1875-1901]

893 microscope-preparations of British fresh-water algae, purchased from time to time, 1898-1900.

Westendorp (GERARD DANIELL) and Wallays (A. E. F.).

"Herbier Cryptogamique," 1,400 Belgian cryptogams in 28 fascicles (1845-60), purchased 1871.

Weymouth (W. A.).

100 species of mosses from Tasmania, presented 1897.

Wheler (Sir GEORGE). [1650-1724]

Plants from Greece in Herb. Sloane.

Whitehead (JOHN). [1860-99]

Collections of plants from the Philippines, presented 1895, 1897.

Whitfield (THOMAS).

90 plants from West Tropical Africa, presented 1843-48.

Whitmee (S. J.).

52 plants from Ellice and Gilbert groups, 370 from Samoa, 148 from Lifu, Loyalty Islands; purchased 1878.

Whyte (ALEXANDER).

220 plants from Milanji, E. Tropical Africa, enumerated and described in *Trans. Linn. Soc. Bot., Ser. 2, vol. iv.*

Wickham (Capt. R.N.).

170 Australian plants, presented 1842.

Wight (ROBERT). [1696-1872]

1100 Indian plants, purchased 1869.

Wiles (JAMES). [*Jl.* 1790-1805]

Plants collected (with Christopher Smith) on Bligh's voyage to Otaheite, 1791-93.

Wilkinson (Sir JOHN GARDNER). [1797-1875]

400 species collected by him in Egypt, presented 1834.

Willkomm (HEINRICH MORITZ). [1821-95]

Spanish plants acquired with Herb. Shuttleworth.

Wilms (FRIEDRICH).

2,073 South African plants, purchased 1898-1900.

Wilson (JOHN BRACEBRIDGE). [1828-95]

523 Australian algae, presented 1885-93; his collection of Victorian algae, containing 1,485 specimens and 140 microscope-slides, purchased 1896.

Wilson (WILLIAM). [1799-1871]

His herbarium of British and exotic mosses and hepatics, consisting of upwards of 50,000 specimens, critically annotated and illustrated with innumerable pencil drawings. This large and important collection was purchased in 1873; in it are contained the materials upon which Wilson based his "*Bryologia Britannica*" (1855) and his descriptions of the mosses of Ross's Antarctic expedition, Seemann's "*Voyage of the Herald*," Drummond's mosses of the Southern United States, and other collections; also numerous authentic specimens of the greatest utility from notable herbaria, and gatherings of mosses from most parts of the world (*cf.* *Journal of Botany*, 1875, p. 180). In 1874 Wilson's lichens and fungi and supplementary mosses were purchased; in 1900, 437 of his British mosses were acquired by exchange from Warrington Museum.

Wimmer (FRIEDRICH). [1803-68]

272 specimens of Salices, purchased 1871.

Winterbottom (JAMES EDWARD). [1803-54]

See STRACHEY.

Wirtgen (PHILIPP). [1806-71]

732 critical plants from the Rhine region, purchased 1863-70.

Wittrock (VEIT BRECHER). [1839-]

Set of critical Erythraee, purchased 1886-91.

Wittrock (V. B.), O. Nordstedt, and NILS GUSTAF Lagerheim. [1860-]

"Algae aquae dulcis exsiccatæ præcipue Scandinavicae," 1,400 specimens in 29 fascicles (1877-96), purchased 1878-97. Lagerheim's connection with this set began with fasc. 26.

Wolley-Dod (*Major* ANTHONY HUNT).

1,866 South African plants, presented 1898-1902.

Woloszczak (EUSTACHE).

"Flora Polonica exsiccata," purchased.

Wood (HENRY HAYTON). [1825-82]

Collection of mosses, chiefly British, purchased 1883.

Wood (JAMES MEDLEY).

2,339 South African plants presented and acquired by exchange from 1884 to 1901.

Woolward (FLORENCE, *Miss*).

Specimens of Masdevallia, presented 1889-99.

Wooton (ELMER O.).

428 Mexican plants, purchased 1901.

Wright (CHARLES). [1811-85]

1,369 plants of New Mexico, purchased 1850-53; 2,127 phanerogams of Cuba, purchased 1865.

Wright (EDWARD PERCEVAL). [1834-]

Plants from the Seychelles, presented 1871.

Wright (WILLIAM). [1735-1819]

Jamaica plants in Herb. Banks.

Wyatt (MARY, *Mrs.*).

"Algae Damnonienses," 237 specimens, chiefly from Devonshire, issued in 4 fascicles and a supplement (c. 1833-40), partly purchased from Mrs. Griffiths in 1852 and the rest acquired with Herb. Shuttleworth in 1877.

Yates (JAMES). [1789-1871]

Collection of Cycadaceae, presented 1866.

Yerbury (*Major*).

57 plants from Aden, presented 1884-85.

Young (ALFRED PRENTICE). [1841-]

A large collection of Indian plants, presented 1884.

Young (JAMES FORBES). [1796-1860]

His British herbarium and collection of cryptogams, transferred from the Kew Herbarium, 1884.

Young (WILLIAM). [*f.* 1753-84]

Folio volume of Carolina plants collected in 1767; figures of the same in another volume.

Zenker (GEORG).

1,515 plants from the Cameroons, purchased 1897-1902.

Zetterstedt (JOHAN EMANUEL). [1828-80]

"Grimmieae et Andreaeae exsiccatae," 50 critical specimens, chiefly Scandinavian, acquired with Herb. Wilson in 1874.

Zetterstedt (J. E.) and Wickbom (J. A. O.).

50 phanerogams and 75 cryptogams of Scandinavia, purchased 1871.

Zetterstedt (J. E. and P. L.).

Published set of Norwegian phanerogams.

Zeyher (KARL LUDWIG PHILIPP). [1799-1858]

1,500 plants from South Africa, purchased 1846.

Zier (JOHN). [*d.* 1796]

Herbarium and MSS. acquired by exchange from New College, Edinburgh. *See Journ. Bot.* 1886, 101.

Zimmermann (OSKAR EMIL RHEINHOLD). [*d.* 1903]

120 microscope-slides of fungi, purchased 1880.

Zimmermann (ALBRECHT).

180 Siamese plants, purchased 1901.

Zollinger (HEINRICH). [1818-59]

697 plants of Java, purchased 1857-58.

GEORGE MURRAY.

THE DEPARTMENT OF GEOLOGY.

THE DEPARTMENT OF GEOLOGY.

I. GENERAL SKETCH.

The collection of fossils was originally assigned to the comprehensive Department of Natural History, which remained undivided until 1837, when Mr. Charles König, who had been Keeper since 1813, was relieved of the care of Zoology and Botany, and became Keeper of the newly-formed Department of Geology and Mineralogy. He had already displayed a predilection for organic remains, having published an account of the fossil human skeleton from Guadaloupe in the *Philosophical Transactions* for 1814, and an illustrated work on some of the fossils in the British Museum under the title "Icones Fossilium Sectiles" (London, 1820). Mr. König was succeeded as Keeper by Mr. George Robert Waterhouse in 1851; and the Department gained additional strength by the appointment of Professor (afterwards Sir Richard) Owen as Superintendent of the Natural History Departments in 1856. With the help of Dr. Samuel P. Woodward, who had been Assistant since 1848, and Mr. William Davies, who had been an Attendant in the Museum since 1843, the collection of fossils and minerals had now become so important, that in 1857 the Department was further sub-divided into those of Geology and Mineralogy, Mr. Waterhouse retaining the Keepership only of the former. Immediately afterwards, in 1858, Dr. Henry Woodward was appointed an Assistant, and on the death of Dr. S. P. Woodward in 1865, he became chiefly responsible for the arrangement of the Invertebrata, and devoted himself specially to researches on the Arthropoda. Mr. William Davies was occupied with the arrangement of the Vertebrata, working chiefly in association with Professor Owen, and in 1875 he was promoted to the rank of Assistant. On the retirement of Mr. Waterhouse in 1880, Dr. Henry Woodward became Keeper of the Department of Geology; and the removal of the collection to the new Natural

History Museum at South Kensington then afforded the much-needed space for expansion. In 1881 Mr. Robert Etheridge was transferred from the Geological Survey to fill the newly-established office of Assistant-Keeper of Geology, and the staff assumed its present number, namely, a Keeper, an Assistant-Keeper, and four Assistants. Mr. Etheridge retired in 1891 after accomplishing much work on the collection of British fossil Invertebrata, and was succeeded as Assistant-Keeper by Dr. Arthur Smith Woodward, who had been an Assistant since 1882, occupied with the arrangement of the fossil Vertebrata in general and the cataloguing of the fossil Fishes in particular. Dr. Henry Woodward retained the Keepership until the end of the century, installed the collection in the new Galleries, and arranged for the publication of a long series of Catalogues, especially of the fossil Vertebrata, which added greatly to the value and usefulness of the Department.

Naturally the collection of fossils increased slowly at first, but during recent years its growth has amply kept pace with the more rapid progress of discovery and research. The first important addition to the original Sloane cabinet was Brander's collection of Upper Eocene shells from the Hampshire cliffs received in 1766. In 1813 it was enriched by the fossil man from Guadaloupe, which was deemed one of the most startling discoveries of the time. In 1818 to 1822 Cuvier made some donations to illustrate his work on fossil bones, which was then attracting universal attention. Mantell similarly presented specimens to explain his pioneer discoveries in Sussex, until his whole Museum was purchased by the Trustees in 1839. The unexpected discovery of a hyæna den at Kirkdale, Yorkshire, made classic by Buckland's description, was illustrated immediately by a donation from Messrs. Salmond and Gibson in 1823. The equally remarkable discoveries of marine reptiles in the Lias of Dorsetshire and Somersetshire were to be best appreciated by a study of the collection of Thomas Hawkins, which was purchased in 1834 and 1840. An Irish Deer was first mounted in the Museum in 1844, and the American Mastodon was acquired in the same year. At this period, indeed, the exhibition of extinct animals was beginning to be imposing, as may be realised by a reference to the early popular writings of Mantell.

At the same time, stratigraphical geology and fossil Invertebrata were by no means neglected. In 1816 the Museum was fortunate enough to obtain the original collection of fossils made

by William Smith, the "Father of English Geology," to illustrate his work "Strata Identified by Organized Fossils," which was published in the same year. Private collections, like that of Gilbertson, were also acquired in rapid succession. The most important addition of this kind was James Sowerby's Collection, which was purchased in 1860, and contained most of the original British fossils described in his "Mineral Conchology."

As the British Dependencies and Colonies were gradually explored, nearly all the pioneer collections of fossils reached the Museum. Cautley presented his Vertebrata from the Siwalik Formation of India in 1840; Bain, Atherstone, and others sent fossil Reptilia from the Karoo Formation of South Africa; Sir Thomas Mitchell, Sir Daniel Cooper, Dr. George Bennett, Mr. G. F. Bennett, and others contributed extinct Marsupials and other Vertebrata from Australia; while the Hon. Walter Mantell and many other explorers in New Zealand sent important collections of remains of the extinct birds of that country. The Department of Geology, in fact, now comprises most of the original type-specimens of the fossil Vertebrata discovered in the British possessions.

Discoveries abroad have also received much attention, and among unique acquisitions may be enumerated the Pomel and Bravard Collections of French Tertiary Vertebrata purchased in 1851-52, the *Archæopteryx* purchased in 1862, the Van Breda Collection of Maastricht and other fossils purchased in 1871, and the Forsyth Major collection of Lower Pliocene Mammalia from Samos purchased in 1889-90. Even the Arctic Regions are well represented by fossils collected by the Nares expedition in 1875-76, by the McCormick Collection bequeathed in 1890, and by the Spitzbergen fossils obtained by Dr. J. W. Gregory during the Conway Expedition in 1896.

During recent years many classic collections made by British palæontologists have been acquired by the Department of Geology. Among these are the Egerton and Enniskillen Collections of fossil Fishes; the Leeds Collection of Oxfordian Reptilia; the Davidson Collection of Brachiopoda; the Brodie Collection of fossil Insects; the Nicholson Collection of Stromatoporoids; the Williamson Collection of Carboniferous Plant-sections; and the Rufford Collection of Wealden Plants; besides several others of less extent.

2. A CHRONOLOGICAL ACCOUNT OF THE PRINCIPAL ACCESSIONS
TO THE COLLECTION OF FOSSILS IN THE DEPARTMENT OF
GEOLOGY TO THE END OF 1900.

The following list of acquisitions, arranged in chronological order, includes only those collections and noteworthy specimens which have proved of special importance in the progress of Palaeontology or are associated with its history. The records of the early years are unfortunately very incomplete. Under each of the later years, important general collections (if any) are mentioned first, while the other acquisitions are recorded approximately in zoological order, beginning with the Mammalia.

1753.

The collection of fossils was begun by that contained in the Museum of Sir Hans Sloane, Bart., which in this year was purchased for the nation and formed the foundation of the British Museum.

1759.

On January 15th, the collections having been removed to Montague House, the Museum was opened for study and public inspection.

1763.

A piece of silicified wood from Antigua was presented by Mr. Andrew Lessly. Tertiary shells from Sicily were presented by Mr. Thomas Hollis of Corscombe, Dorset.

1766.

The series of Eocene shells and other remains from the Hampshire cliffs, collected and presented to the Museum by Gustavus Brander, F.R.S., was completed this year, and described in a special work by Dr. Solander ("Fossilia Hantoniensia, &c.," 1776).

1767.

Some remains of *Mastodon americanus*, from the banks of the river Ohio, U.S.A., and a molar tooth of *Mastodon humboldti*,

from an unknown locality in South America, were presented by the Earl of Shelburne. A mandibular ramus of *M. americanus* in this collection was described and figured by John Hunter, *Phil. Trans.*, vol. lviii. (1768), p. 34, pl. iv., figs. 1, 3; while the South American tooth was subsequently figured by Falconer and Cautley, "Fauna Antiqua Sivalensis," pl. xl, fig. 10, under the name of *M. andium*.

1781.

The Royal Society's collection of "natural and artificial curiosities," presented to the Museum this year, comprised several fossils.

1784.

A mandibular ramus of *Mosasaurus camperi*, from the Upper Cretaceous of Maastricht, was presented by Dr. Peter Camper, through Sir Joseph Banks, Bart.

1791.

A pair of antlers of Irish deer (*Cervus giganteus*), from Ireland, was presented by Lord Cremorne.

1795.

Tertiary shells and corals from Jamaica were presented by Dr. Broughton.

1799.

The bequest of Rev. Mordaunt Cracherode, containing many common fossils, was received.

1813.

A human skeleton in coral limestone from Guadaloupe, West Indies, captured on the taking of the Island from the French by Sir Alexander Cochrane, R.N., was presented by the Lords of the Admiralty. This specimen was described by Mr. C. König in *Phil. Trans.*, vol. civ. (1814), p. 107, pl. lii.

A skull of *Rhinoceros antiquitatis* from Siberia, was presented by Mr. Charles Elter.

1816.

Fossils from Wiltshire were presented by Miss Etheldred Benett. They included sponges from the Upper Greensand of Warminster, figured in a small work by the donor.

The British fossils collected by William Smith to illustrate his "Strata Identified by Organized Fossils" (1816), were purchased.

1817.

Miss Benett's donation was continued.

"Specimens illustrative of the Mineral Geography of the South Downs, from G. A. Mantell, Esq."—apparently Dr. Mantell's first donation.

"Four large specimens of Ichthyolites from Loughborough" (probably *Dapedius orbis* from the Lower Lias of Barrow-on-Soar), were presented by the Countess of Aylesford.

Cretaceous fishes from the Lebanon were collected and presented by Lady Esther Stanhope.

A skull of *Bos primigenius* from Athol, Perthshire, was presented by Mr. David Inglis, and subsequently described and figured in Owen's "British Fossil Mammals and Birds," pp. 501-2, figs. 208, 210.

1818.

Miss Benett's donation was continued.

Various fossil remains from the Gypsum Quarries near Paris, were presented by the Administration of the Jardin des Plantes, through Baron Cuvier.

1819.

Part of the vertebral column of *Ichthyosaurus*, from Lower Lias, Lyme Regis, was presented by Sir Everard Home, Bart.

Dr. Mantell's donation was continued.

1822.

Tertiary shells from Barbados were presented by Mr. G. B. Greenough.

A series of coloured plaster casts of mammals from the Paris Gypsum, preserved in the Paris Museum of Natural History, and described and figured in Cuvier's "Ossements Fossiles," was presented by Baron Cuvier.

Fossil bones obtained by Mr. Whidbey from the cavern of Oreston, near Plymouth, were presented by Mr. William Clift. This is part of the first collection of cavern remains made in England.

1823.

Miss Benett's donation was continued.

Fossil remains from the Kirkdale Cave, Vale of Pickering, Yorkshire, were presented by Messrs. William Salmond and John Gibson.

1824.

Mr. Gibson's donation was continued.

Shells from the Crag of Suffolk and Norfolk were presented by Rev. G. R. Leathes.

1825.

Among the donations were :

A tooth of *Iguanodon* in Wealden sandstone, from Mr. M. B. Durrant; plaster casts of teeth of *Iguanodon*, from Dr. G. A. Mantell; and "A new variety of the Nave Encrinite," from Mr. George Cumberland of Bristol.

1826.

A specimen of *Ichthyosaurus* from the Lias of Balderton, Nottinghamshire, was presented by Dr. Bland.

1827.

A Paramoudra (large flint) from the Chalk of Norfolk was presented by Rev. John Gunn.

The Sömmering collection was purchased.

1828.

Further donations were received from Dr. G. A. Mantell.

Mr. J. S. Pratt of Bath, presented a specimen of the Lansdown Encrinite, described by Dr. J. E. Gray as *Apiocrinites pratti*.

Fossils from the Braunston Crag, and fossil wood from the submerged forest of the Norfolk coast, were presented by Mr. Samuel Woodward of Norwich.

Tertiary wood from Antigua was presented by Mr. J. A. Wood.

Bivalve shells from the Coal-Measures of Newcastle, were presented by Mr. W. Norris of Bury.

1829.

Three teeth of *Iguanodon* in Wealden sandstone from Sussex, were presented by Dr. G. A. Mantell.

Freshwater marl from the Isle of Wight containing seed-vessels of *Chara*, was presented by Mr. (afterwards Sir) Charles Lyell.

Fossil plants from the Lower Oolites of Scarborough, were presented by Mr. John Williamson.

1830.

Mammalian remains from Kent's Cavern, Torquay, were presented by Rev. J. M'Enery.

Nine fossil corals were presented by Mr. S. P. Pratt.

A fossil cycad from Portland was presented by Miss Benett.

1831.

Tertiary shells from Italy, were presented by the Marquess of Northampton.

A Pentacrinite from Farleigh, near Bath, was presented by Miss Benett.

1833.

Further donations were made by Dr. G. A. Mantell.

Fossils from the London Clay of Highgate Archway were presented by Mr. N. T. Wetherell.

1834.

A collection of Liassic Ichthyosaurs and Plesiosaurs, illustrative of Hawkins' "Memoirs on Ichthyosauri" (1834), was purchased from Mr. Thomas Hawkins.

Plaster casts of the more important bones of *Megatherium* in the Museum of the Royal College of Surgeons, were presented by the President and Council of the College.

Plaster casts of North American Trilobites, described in a Monograph by Jacob Green, M.D., were presented by Richard Harlan, M.D., and Jacob Green, M.D., of Philadelphia.

Secondary fossils, chiefly from Purbeck, were presented by Mr. (afterwards Sir) W. C. Trevelyan.

The John Finch Collection of Tertiary Mollusca from Maryland, described by Thomas Say, *Journ. Acad. Nat. Sci. Philad.*, vol. iv. (1824), pp. 124-155, pls. vii.-xiii., was purchased.

1835.

Coal-plants from Cape Breton, Nova Scotia, were presented by Mr. J. B. Ford.

Fossils from the Carboniferous Limestone of Derbyshire were presented by the Marchioness of Hastings.

1836.

Silurian Trilobites were presented by the Earl of Cawdor and Thomas A. Knight, Esq.

1837.

A further series of Mammalian bones and teeth from the Kirkdale Cave, Yorkshire, was presented by Mr. W. Salmond.

The first instalment of a collection of Mammalia (*Dinotherium*, *Mastodon*, &c.), from the Lower Pliocene of Eppelsheim, was purchased from Dr. Kaup.

Some fish-remains from the Oligocene of Canton Glarus, Switzerland, were purchased through Prof. L. Agassiz.

Numerous German Triassic and Jurassic fossils were purchased from Dr. Braun. Some English and French Jurassic and Cretaceous fossils were presented by Sir Henry T. De la Beche. A few Palæozoic fossils, chiefly Brachiopods, from Tasmania, were purchased from Dr. J. Lhotzky.

1839.

The most important event of this year was the purchase of the collection of Wealden and Cretaceous fossils of Dr. Gideon A. Mantell, which had for some time been exhibited as the Mantellian Museum in Brighton.

More German Jurassic fossils were purchased from Dr. Braun. A few Invertebrata, chiefly Lamellibranchs and Echinoderms, from the Tertiary of Malta, were presented by Miss Emilie Attersol.

A few Cretaceous plant-remains from the Iguanodon quarry at Maidstone, were presented by Mr. W. H. Bensted. Lower Jurassic plant-remains from Yorkshire, were purchased from Dr. Peter Murray of Scarborough.

A collection of silicified fern-stems (*Psaronius*, &c.) from the Permian of Saxony, including the originals of Cotta's "Die Dendrolithen" (1832), was purchased from Dr. C. Bernhard Cotta.

1840.

The additions to the collection of fossil Vertebrata were specially remarkable this year.

The extensive series of remains of Tertiary Mammalia collected in the Siwalik Hills, India, by Major (afterwards Colonel Sir) Proby T. Cautley, was presented by him to the Museum.

Additional Liassic Ichthyosaurs and Plesiosaurs, illustrative of Hawkins' "Book of the Great Sea Dragons" (1840), were purchased from Mr. Thomas Hawkins. The type-specimen of *Plesiosaurus rugosus*, Owen, from the Lower Lias of Granby,

Nottinghamshire, was presented by the Duke of Rutland. Specimens of *Ichthyosaurus*, from the Upper Lias of Whitby, were also purchased.

Among fishes, the unique type-specimen of *Holoptychius nobilissimus*, Agassiz, from the Upper Old Red Sandstone of Perthshire, was purchased from Rev. James Noble. A slab of Keuper Sandstone from Coburg, exhibiting several specimens of *Dictyopyge socialis*, was also purchased.

A fine slab of Lower Lias from Watchett, Somersetshire, covered with "aggregated iridescent ammonites" (*Psiloceras planorbis*), was acquired by purchase.

1841.

Remains of the cave bear (*Ursus spelæus*) from the Sophia Cavern, Muggendorf, Franconia, were purchased through the Earl of Enniskillen. Bones of Pleistocene Mammalia from the caverns of Minas Geraes, Brazil, were purchased from Mr. Claussen. Fragments of *Mastodon*, &c., from Burma and from Perim Island, Gulf of Cambay, were presented respectively by Lieut.-Col. Burney and Miss Pepper.

The type-skull of *Stenoceros brevior*, Tate and Blake, from the Upper Lias of Whitby, was purchased from Mr. Ripley.

A slab of Petworth marble, from the Wealden of Sussex, was presented by Mr. George Thornton.

The Gilbertson Collection of Carboniferous fossils from Lancashire and Yorkshire, was acquired by purchase for the Department of Zoology.

1842.

The MacEney Collection of Pleistocene Mammalian remains from Kent's Cavern, Torquay, was purchased at a sale. Skulls of male and female Irish Deer (*Cervus giganteus*), from Ireland, were purchased through the Earl of Enniskillen.

A skeleton of *Pelagosaurus brongniarti*, a head of *Ichthyosaurus*, and other fossils from the Upper Lias of Whitby, were purchased from Mr. Ripley.

1843.

A skeleton of the Irish Deer (*Cervus giganteus*), composed of the bones of several individuals, was presented by the Ven. Archdeacon Maunsell, and first mounted for exhibition in the

following year. Some Mammalian remains from Kent's Cavern, Torquay, were purchased from Mr. Heggerty.

Miss Baker's collection of Jurassic fossils and Pleistocene bones from Northamptonshire, was acquired by purchase.

A few fossil Mollusca from Cutch were presented by Lieut. T. Postans.

1844.

The most important acquisition of this year was the series of remains of *Mastodon americanus* from Missouri, purchased from Mr. Koch.

A further collection of fossil Mammalia from the caverns of Minas Geraes, Brazil, was purchased from Mr. Claussen.

The Rev. C. Green's collection of Mammalian and other remains from the Forest Bed and other superficial deposits of the Norfolk coast, was acquired by purchase. Some Pleistocene Mammalia from the Thames Valley were purchased from Mr. Ball.

A fine slab of Triassic flagstone from Turner's Falls, Massachusetts, U.S.A., showing tridactyle footprints, was purchased from Dr. Deane.

1845.

A very extensive collection of Pleistocene Mammalia from the province of Buenos Ayres, Argentina, purchased from Señor de Angelis, included among other specimens the greater part of the skeleton of *Megatherium americanum*, and a unique skull and mandible of *Mastodon (andium or humboldti)*.

The unique skull of *Elephas ganesa*, with large tusks, from the Pliocene of the Siwalik Hills, India, was presented by Captain (afterwards General Sir) William Erskine Baker, and was mounted for exhibition in the following year. A skull of *Elephas insignis*, also from the Siwalik Hills, was presented by Dr. Hugh Falconer.

A further purchase of fossil Mammalia from Eppelsheim was made from Dr. Kaup. A few Pleistocene Mammalian remains from Kent's Cavern, Torquay, were presented by Rev. Upton Richards.

Bones of Dinornithidæ from New Zealand were purchased from Mr. Percy Earl.

Numerous small purchases from dealers added much to the collection of fossil fishes.

A selection of miscellaneous Jurassic fossils from the collec-

tion of Dr. James R. Johnson, of Hot Wells, Bristol, including the type-specimen of *Pentacrinus johnsoni*, was acquired by purchase.

Portions of *Pterygotus anglicus* from the Old Red Sandstone of Forfarshire, were presented by Mr. (afterwards Sir) Charles Lyell.

1846.

Important remains of *Halitherium schinzi*, from the Lower Miocene of Hesse Darmstadt, were purchased from Dr. Kaup. Many Pleistocene Mammalia from Essex were also acquired by purchase.

The type-skull of *Crocodylus spenceri*, from the London Clay of Sheppey, was purchased from Mr. E. Spencer. Two slabs of Triassic flagstone with Reptilian footprints (*Brontozoum giganteum*) from Greenfield, Massachusetts, U.S.A., were purchased from Miss Baker.

The type-specimen of *Cephalaspis lyelli*, from the Lower Old Red Sandstone of Glammis, Forfarshire, was presented by Mr. (afterwards Sir) Charles Lyell. The type-specimen of *Lepidotus fittoni*, from the Wealden of Sussex, was presented by Mr. W. J. Martin.

Some Australian Palæozoic Brachiopoda, collected by Dr. Jeunnet, were presented by Lord Stanley.

A fine specimen of *Stigmaria ficoides*, from Coal Measures, near Nottingham, was presented by the Duke of Rutland.

1847.

The collection of Tertiary Mammalia from Hesse Darmstadt, especially from Eppelsheim, received important additions by purchase from Dr. Kaup. Additional Pleistocene Mammalia from the Thames Valley, were also acquired by purchase. Remains of *Elephas* and *Zeuglodon* from Texas, U.S.A., were purchased at a public auction. The skull of the large *Bubalus palæindicus*, and other Pleistocene Mammalian remains from the Narbada Valley India, were presented by Mr. Charles Fraser. The type-skull of *Mastodon perimensis*, from the Pliocene of Perim Island, Gulf of Cambay, was presented by Captain G. Fulljames.

A fine skeleton of *Stencosaurus bollensis*, from the Upper Lias of Boll, Würtemberg, was purchased from Dr. Kaup.

Fossil fishes from the Old Red Sandstone of Scotland, were presented by Dr. Hugh Falconer and Mr. (afterwards Sir)

Norman M'Leod. Some fish-remains from the Siwalik formation were presented by Major (afterwards Colonel Sir) Proby T. Cautley.

A collection of Miocene shells and corals from Touraine, was purchased from Mr. Mathieu. Specimens of amber from the Baltic coast, containing insects and plant-remains, were purchased from Dr. Berendt.

1848.

Another instalment of Mr. Charles Fraser's donation of Indian fossil Mammalia was received. A few Mammalian remains from Perim Island, Gulf of Cambay, were presented by Dr. Buist.

A large collection of Lower Tertiary Mammalia, with a few other vertebrate remains, from Auvergne, France, was purchased from the Abbé Croizet.

Remains of an ostrich, *Struthio asiaticus*, from the Pliocene of the Siwalik Hills, India, were presented by Colonel Colvin. A large series of bones of Dinornithidæ, *Aptornis*, and other birds, collected by the Hon. Walter B. D. Mantell in the superficial deposits of New Zealand, was acquired by purchase.

The type-specimen of *Plesiosaurus dolichodeirus*, from the Lower Lias of Lyme Regis, was purchased at the sale of the late Duke of Buckingham. Some Cheirotherian footprints from the Trias of Cheshire, were purchased from Mrs. E. Slone.

A large and miscellaneous collection of fossils, chiefly from Germany and France, was purchased from Mr. Paul Mohr. It included a slab of Upper Lias from Würtemberg covered with fine examples of *Pentacrinus*.

A few British Palæozoic Brachiopoda were presented by Dr. Thomas Davidson. Some Palæozoic Brachiopoda from the Arctic Regions were presented by Sir John Richardson.

Some rock-specimens with fossil Mollusca and silicified wood, from the interior of Northern Australia, were presented by Sir Thomas Mitchell.

1849.

The first instalment of a large collection of British fossils, chiefly Jurassic and Cretaceous, was purchased from Mr. William Cunnington. Invertebrata from the Upper Greensand of Warminster, were purchased from Mr. John Baker.

Some Pleistocene non-marine Mollusca from Copford, Essex,

were presented by Mr. John Brown, of Stanway. Upper Liassic Brachiopoda from Iminster, were presented by Mr. Charles Moore. A few fossils, chiefly Brachiopoda, from the Wenlock Limestone, were presented by Mr. John Gray, of Hagley.

A series of Tertiary invertebrate fossils from Sind, India, was presented by Captain (afterwards General Sir) William Erskine Baker.

1850.

The most important general collection acquired during this year was that of Frederic Dixon, of Worthing, purchased from his executors. It consists chiefly of fossils from the Chalk and Eocene formations of Sussex, and includes many specimens described and figured in Dixon's "Geology and Fossils of Sussex."

Among Vertebrata, Mr. Searles Wood presented his valuable collection of Reptilian and Mammalian remains from the Upper Eocene (or Oligocene) of Hordwell Cliff, Hampshire, including several described and figured specimens. Capt. Kellett and Lieut. Wood presented a series of Pleistocene Mammalia from Kotzebue Sound, Alaska; and Mr. D. Sharpe presented a few similar remains from Erith, Kent, and Grays, Essex. The restored model of the shell of the giant tortoise, *Colossochelys atlas*, from the Pliocene of India, was completed under the direction of Dr. Hugh Falconer, and prepared for exhibition.

Mr. S. P. Pratt presented Hippurites and Sphærulites from the Cretaceous of France. Miscellaneous purchases included Miocene fossils from Malta, Chalk fossils from Kent and Norfolk, Oxford Clay fossils from Wiltshire, Silurian Trilobites and Crinoids from Dudley, and Devonian Corals and Stromatoporoids from Devonshire.

1851.

The Pomel Collection of fossil Vertebrata, chiefly Mammalia, from the freshwater Tertiaries of Central France, including some described and figured specimens, was an important acquisition by purchase. A few similar Mammalian remains from the Mayence Basin were also purchased. Some well-preserved fishes of the genera *Palæobalistum* and *Prolates*, from the Upper Chalk of Mont Aimé, Marne, France, were purchased from Baron Ponsort. An ischium apparently of *Megalosaurus*, from the Stonesfield Slate, was presented by Mrs. Townsend.

Dr. J. J. Bigsby presented an important collection of Palæo-

zoic Invertebrata from various localities in North America; and Mr. J. N. Pearson gave some Ordovician brachiopods, corals, &c., from Cincinnati, Ohio. The purchase of the Klipstein Collection added a valuable series of Invertebrata from the St. Cassian beds of the Tyrol, including specimens described in Klipstein's "Beiträge zur geologischen Kenntniss der Oestlichen Alpen," 1843. Among miscellaneous purchases, the acquisitions of Jurassic Invertebrata from France are noteworthy.

1852.

The general collection of about 2000 fossils bequeathed by Miss Cowderoy was received this year. It is especially rich in Eocene and Oligocene Mollusca from Hampshire and the Isle of Wight.

Among Vertebrata, the most conspicuous donation was that of the "Fossil Fox of Oeningen" (*Galecynus oeningensis*, Owen), from Sir Roderick I. Murchison. About 300 mammalian remains from the Pleistocene of Essex, including some unique described and figured specimens, were presented by Mr. John Brown, of Stanway. A large collection of Mammalian remains from the Tertiary and Pleistocene beds of France was purchased from Mr. Auguste Bravard. Fossil fishes from the Miocene of Oran, Algeria, were purchased.

Among Invertebrata, Sir Robert Schomburgk presented a good collection of Tertiary shells and rock-specimens from San Domingo, West Indies. Mr. Charles Darwin presented two South American fossil brachiopods, described in his "South America." Mr. George Tate, of Alnwick, presented some Carboniferous and Permian brachiopods from the North of England. Mr. S. P. Pratt presented a few Nummulites from France and Spain. The numerous purchases included shells from the Tertiary beds of France and Italy, from the Cretaceous and Palæozoic formations of Belgium, and from many British rocks.

1853.

A selection of about 100 vertebrate, and 1000 invertebrate fossils from the second collection of the late Dr. G. A. Mantell was purchased from his executors. Among other valuable specimens, it comprised many bones of *Iguanodon* from the Wealden of Brook, Isle of Wight.

Two other general collections were obtained from abroad. Mr. Daniel Hanbury presented some Devonian Brachiopoda

from China, described by Dr. Thomas Davidson (*Quart. Journ. Geol. Soc.*, 1853), and also Pleistocene Mammalian teeth from Chinese caverns, which he had purchased in the apothecaries' shops at Canton. Mr. W. K. Loftus, a Boundary Commissioner, presented a collection of Cretaceous and Tertiary fossils, chiefly Hippurites and Nummulites, from Persia.

The collection of fossil Mammalia was much enriched by a series of remains from the Pliocene of the Val d'Arno, Italy, collected and presented by Mr. J. B. Pentland. A valuable series of mammalian remains, including skulls of the cave-bear, from the caverns of Sundwig, Westphalia, collected by Mr. B. Van Becke, was purchased at a sale. The unique palate of *Anthracotherium magnum*, from the Lower Miocene of Flonheim, Hesse Darmstadt, was also acquired by purchase.

Among Reptilia, the Wilcox Collection, chiefly Chelonia from the Purbeck Beds, was purchased. Some noteworthy specimens of *Ichthyosaurus* and *Plesiosaurus*, from the Lower Lias of Lyme Regis, were also added.

The Astier collection of Mollusca, chiefly Cephalopoda, from the Cretaceous and Jurassic of the Basses Alpes, was obtained by purchase. A large collection of Belgian fossils was similarly acquired from Prof. L. G. de Koninck. Rev. P. B. Brodie presented some Jurassic insects and other remains; Mr. N. T. Wetherell, some London Clay Gasteropoda; and Mr. S. P. Pratt, some Palæozoic Brachiopoda from Spain.

1854.

A large collection of Pleistocene Mammalia from the Pampa Formation of the Argentine Republic was purchased from Mr. Auguste Bravard.

Important additions were made to the collection of Hippurites from the Cretaceous of France and Portugal, notably a donation from Mr. S. P. Pratt. Mr. Charles Stokes' collection of Silurian Cephalopoda from Drummond Island, Lake Huron (some described in *Trans. Geol. Soc. London*, 1824 and 1840), was purchased from his executors. Series of Russian Silurian Mollusca and Brachiopoda, and Polish Miocene Mollusca, were presented by Sir Roderick I. Murchison. Mr. H. W. Taylor's collection of English Chalk fossils was purchased from his executors. A large collection of Mollusca from the Miocene of Bordeaux, was purchased from Mr. Deshayes. Mr. Charles Darwin presented a few fossil Cirripedes.

1855.

The valuable collection of Lower Tertiary Vertebrata, made by Barbara, Marchioness of Hastings, was purchased this year. Besides other specimens from Montmartre, near Paris, and from the Mayence Basin, it comprised about 1500 bones and teeth of Mammalia and Reptilia from the Eocene and Oligocene of Hampshire and the Isle of Wight.

A large collection of Silurian Invertebrata from Bohemia was purchased from Mr. J. Barrande. Many French Jurassic Mollusca were also purchased, some from Mr. Tesson. Among British Jurassic fossils, the most noteworthy were some fine *Apiocrini* (Bradford Encrinites), purchased from Mr. Wood. Tertiary Echinoids from Sind and Java were presented respectively by Major (afterwards Sir) William Erskine Baker and Mrs. Pfeiffer.

1856.

The most important acquisition by purchase this year was the series of fossil bones of birds (chiefly the extinct Moas) and other animals collected by the Hon. Walter B. D. Mantell in New Zealand. The skeleton of *Pachyornis elephantopus* was then reconstructed by Prof. Owen from the new material in this collection.

Mr. John Lubbock (now Lord Avebury) presented part of the skull of a musk ox (*Ovibos moschatus*) discovered by him in the Pleistocene Thames gravels at Maidenhead, Berkshire. Mr. J. M. Geils presented some remains of *Elephas armeniacus* from Asia Minor.

Among numerous acquisitions of Invertebrata were two valuable donations of Tertiary fossils from Jamaica and the Canaries, presented by the Hon. Edward Chitty and Sir Charles Lyell, Bart., respectively.

Total number of acquisitions, about 6700.

1857.

The Tesson Collection, consisting chiefly of fossils from the Jurassic formations near Caen, Normandy, was a remarkable acquisition. Besides Invertebrata, it comprised some well-preserved fishes and unique remains of *Teleosaurus* and *Pelagosaurus*, some of the latter described by Deslongchamps.

Valuable additions were made to the collection of Pleistocene Mammalia. Large series of bones and teeth of extinct marsupials,

including *Diprotodon*, from superficial deposits in Australia, were purchased at a public auction. A skull of an Irish Deer was presented by the Earl of Enniskillen. Mammalian remains from a submerged forest, met with in excavating the Jarrow Docks, Newcastle-on-Tyne, were presented by Messrs. Harrison and Hodgson.

The first vertebræ of the gigantic extinct lizard, *Megalania prisca*, were received with other fossil Mammalia from Australia. A skull of the Triassic *Cyamodus* (then named *Placodus*), purchased this year, proved that this animal was a reptile, not a fish, as previously supposed.

A further instalment of the Barrande Collection was purchased. Donations chiefly of English Jurassic and Cretaceous Invertebrata were continued by Mr. S. P. Pratt. A collection of Tertiary Mollusca from Belgium was purchased from Mr. Binkhorst. Series of Tertiary Mollusca from India were presented by Lieut.-Col. Sykes, from Madeira by Sir Charles Lyell, Bart., and Mr. James Yate Johnson.

Total number of acquisitions, 9880.

1858.

The series of Pleistocene Mammalia was increased by the purchase of the large collection made by the Rev. John Layton from the Norfolk coast and the bed of the North Sea. Plaster casts of skulls of *Diprotodon* and *Nototherium*, from Australia, presented by the Trustees of the Australian Museum, Sydney, were also valuable additions. Among earlier Mammalia, a collection of remains of *Dinotherium* and other genera from the Middle Miocene of Sansan, France, was purchased from Mr. L. Saemann.

Among purchases of extinct reptiles may be mentioned the type-skull of the giant turtle (*Chelone gigas*) from the London Clay of Sheppey; a Teleosaurian skull from the Upper Lias of Whitby; various other Liassic reptilian remains, including the first skull of *Dimorphodon macronyx* from Lyme Regis; and some bones of *Iguanodon* from the Wealden of the Isle of Wight.

A large collection of Cretaceous and Tertiary fossils from Switzerland and the adjoining parts of Germany, was purchased from Dr. Brückmann. About 200 Middle Eocene Mollusca from Stubbington, Hampshire, were purchased from Mr. Henry Keeping.

1859.

The largest collection acquired this year was that of Yorkshire fossils purchased from Mr. William Bean, of Scarborough. Besides numerous Invertebrata, this collection included an extensive series of Oolitic plants from Gristhorpe and Haiburn Wyke, some described by Brongniart, Lindley and Hutton, Phillips, and Bunbury. Count Strzelecki's collection of fossils from New South Wales, described in his work on that country, was also an important acquisition by purchase.

Among Vertebrata, a series of skulls of *Bos longifrons*, from the Irish peat-bogs, was presented by Dr. Wylde. A collection of fossil reptiles from the Karoo formation of South Africa, including the first evidence of the genera *Ptychognathus*, *Galesaurus*, and *Cynochampsia*, was transmitted by Sir George Grey, Governor of Cape Colony. Some remains of *Stagonolepis*, from the Trias of Elgin, were presented by Dr. James Taylor. Old Red Sandstone fishes from Tynet Burn, Banffshire, were presented by the Duke of Richmond. Oligocene fishes from Canton Glarus, Switzerland, were presented by Miss Elizabeth Warne.

Among Invertebrata, British Cretaceous fossils were presented by Mr. W. Cunningham, and specimens of the newly-described Carboniferous Crinoid, *Woodocrinus*, by Mr. E. Wood.

Some examples of *Calamites*, from the Coal Measures of Saxony, were presented by Dr. Alexander Petzholdt to illustrate his memoir on that genus.

Total number of acquisitions, 3550.

1860.

The Sowerby Collection, illustrating James Sowerby's "Mineral Conchology of Great Britain," was purchased from James de Carle Sowerby. It was the first extensive collection of type-specimens of British invertebrate fossils acquired by the Museum.

The second instalment of the collection of Pleistocene Mammalia and non-marine Mollusca made by Mr. John Brown, of Stanway, was bequeathed to Prof. (afterwards Sir Richard) Owen and presented by him to the Museum.

Valuable additions were also made to the collection of fossil Mammalia and Reptilia from the Siwalik Hills, India, by a donation from the Secretary of State for India. The fine skull

of *Elephas namadicus*, from the Pleistocene of the Narbada Valley, figured in Falconer and Cautley's "Fauna Antiqua Sivalensis," was purchased from the United Service Museum.

Among invertebrate fossils received were many donations, including Tertiary shells from South America, from Mr. W. G. Lettsom; shells from a raised beach in Teneriffe, from Sir Charles Lyell, Bart.; and Pliocene shells from Tejares, Malaga, collected by Dr. Henry Woodward.

Total number of acquisitions, about 10,000.

1861.

Few additions were made to the collection of fossil Mammalia. The most important was a series of remains of extinct Marsupialia from Australia, presented by Sir Daniel Cooper, Bart., and the Governors of the South Australian Museum.

Among fossil Reptilia, the most important acquisition was the unique skeleton of *Scelidosaurus harrisoni*, from the Lower Lias of Charmouth, Dorset, purchased from Mr. James Harrison, who discovered and prepared the specimen. The first evidence of a Plesiosaurian from New Zealand (*Plesiosaurus australis* of Owen) was received as a donation from Mr. T. H. Cockburn Hood. Three fine specimens of *Ichthyosaurus* from the English Lias were purchased.

Six specimens of *Archegosaurus decheni*, from the Lower Permian of Rhenish Prussia, were presented by Prof. (afterwards Sir Richard) Owen. The Lower Devonian *Climacopterus scutiger* and *Acanthodes mitchelli*, from Mr. James Powrie, were among the donations of fossil fishes.

The greater part of the collection of Dudley Upper Silurian fossils made by Mr. John Gray, of Hagley, was purchased and formed the most important acquisition of Invertebrata during the year. The Gilbertson Collection of Yorkshire Carboniferous fossils (purchased 1841) was transferred from the Department of Zoology. A further instalment of the Cunningham Collection was purchased.

A collection of fossil leaves from a Tertiary formation on the banks of the Mackenzie River, Canada, was presented by Sir John Richardson. Some Carboniferous plants from Zwickau, Saxony, were purchased.

Total number of acquisitions, 5522.

1862.

This year was noteworthy for the acquisition of the *Archæopteryx*, which was purchased, with a large series of fossil fishes and reptiles from the Lithographic Stone of Solenhofen, Bavaria, from Dr. Häberlein of Pappenheim.

A gigantic tooth of *Pliosaurus grandis*, from the Kimmeridge Clay of Dorset, was the first of a long series of small donations from Mr. J. C. Mansel (afterwards Mansel-Pleydell). Footprints of *Rhynchosaurus* on Triassic sandstone from Brewood, South Staffordshire, were presented by Rev. Henry Housman. Tri-dactyle footprints from the Trias of Connecticut, U.S.A., were presented by Prof. E. Hitchcock.

The first important remains of Labyrinthodonts, *Capitosaurus* and *Trematosaurus*, from the Trias of Germany, were acquired by purchase. A plaster cast of two associated vertebræ from the Coal Measures of Nova Scotia, named *Eosaurus acadianus* by Prof. O. C. Marsh, of Yale University, was presented by the discoverer—his first benefaction to the Museum.

Among Invertebrata may be mentioned a new Hippurite (*Barrettia monilifera*) from the Cretaceous of Jamaica, presented by the discoverer, Mr. Lucas Barrett; also many purchases, including *Pterygotus* from the Upper Silurian of Lanarkshire, Crustacean remains from the English Lias, Gault, and Greensand, many other Tertiary, Cretaceous, and Jurassic fossils from England, Asteroidea from the Lower Ludlow of Herefordshire, and a series of Silurian fossils from Ohio and Indiana, U.S.A.

Many Carboniferous plants from Airdrie and Burdiehouse were also purchased.

Total number of acquisitions, 3144.

1863.

An extensive selection from the Saull Collection was purchased from the Trustees of the Metropolitan Institution. Besides several important remains of fossil reptiles described by Prof. Owen, it comprised some of the invertebrate fossils described in Sowerby's "Mineral Conchology."

Dr. J. W. (afterwards Sir William) Dawson, of McGill University, Montreal, presented a series of specimens to illustrate his recent discoveries of land-shells and small land-reptiles (or amphibians) in the decayed erect tree-trunks of the South Joggins Coal Measures, Nova Scotia.

A second instalment of the Häberlein Collection was purchased, comprising chiefly Insecta, Crustacea, Cephalopoda, and Plantæ.

Plaster casts of the much-discussed Neanderthal and Engis skulls were acquired by purchase. Some remains of *Hypopotamus*, from the Oligocene of the Isle of Wight, were presented by Mr. F. E. Edwards.

Some fossil Chelonia were purchased from the collection of Prof. Thomas Bell. More remains of *Plesiosaurus australis*, and other extinct marine reptiles from New Zealand, were presented by Mr. T. H. Cockburn Hood. Supposed fossil eggs of reptiles from the Great Oolite of Cirencester were presented by Mr. Joshua Brown.

A fine skull of the gigantic Labyrinthodont, *Metopias diagnosticus*, from the Keuper of Würtemberg, was included in the Häberlein Collection.

Numerous Jurassic and other English invertebrate fossils were purchased from the collections of Prof. John Morris and Mr. William Buy. Some almost unique specimens of Mero-stomata (*Eurypterus lanceolatus* and *Slimonia acuminata*) from the Upper Silurian of Lanarkshire, and specimens of the newly-discovered Cambrian trilobite, *Paradoxides davidis*, were also purchased. Cretaceous fossils collected by Captain Mansell, R.N., in the Lebanon, were presented by Dr. J. D. (afterwards Sir Joseph) Hooker. Palæozoic fossils, chiefly ferns, from Tasmania, were presented by Dr. Joseph Milligan.

Dicotyledonous leaves from the Tertiary of Disco, North Greenland, were presented by Mr. J. W. Taylor.

Total number of acquisitions, 3053.

1864.

The most important acquisition of this year was a collection of remains of Pleistocene Mammalia associated with human bones and implements, discovered by the Vicomte de Lastic in a cavern on the banks of the Aveyron, near Bruniquel, Tarn-et-Garonne, France. The collection was purchased from the discoverer.

A nearly complete skull of the mammoth, *Elephas primigenius*, was extricated from the Thames brick-earth at Ilford, Essex, under the direction of Mr. William Davies and Dr. Henry Woodward. Another important collection of Pleistocene Mam-

malia, including *Diprotodon*, from Queensland, was presented by Sir Daniel Cooper, Bart.

A fine collection of fossil Reptilia from the Trias of Würtemberg, including unique specimens of *Belodon*, *Teratosaurus*, and *Chelytherium*, was purchased from Dr. Kapff. The type-specimen of *Plesiosaurus rostratus*, from the Lower Lias of Charmouth, was also purchased.

Very numerous additions were made to the collection of fossil fishes, especially to the series from the Devonian, Permian, Triassic, and Liassic formations.

The first specimen of the supposed Laurentian Foraminifer, *Eozoon canadense*, was presented by Sir William E. Logan. The type-specimen of the Jurassic star-fish, *Solaster moretonis*, from the Great Oolite, was presented by the Earl of Ducie. Remains of *Pterygotus anglicus* from the Lower Old Red Sandstone of Forfarshire, were purchased.

Total number of acquisitions, 4651.

1865.

The purchase of a large selection from the collection of Dr. J. S. Bowerbank secured for the Museum this year an important accession of British Mesozoic and Tertiary fossils, including many described specimens of various groups. In addition to the remains of animals, the collection comprised a very large series of fossil fruits from the London Clay of Sheppey.

A plaster cast of the carapace of the gigantic extinct armadillo, *Glyptodon reticulatus*, from the Pampa of Buenos Ayres, was obtained by exchange with Prof. H. A. Ward. Actual bones of this animal and *Megatherium*, *Toxodon*, *Mastodon*, etc., from the Pampa formation of Buenos Ayres and Uruguay, were also presented by Captain John Parish, R.N., and Mr. David A. Stoddart. Other noteworthy acquisitions among Mammalia were skulls of *Bos longifrons* from Lough Gur, Limerick, presented by Mr. J. F. W. De Salis; and a large tusk of mammoth, dredged off the coast of Norfolk, presented by Rev. Greville J. Chester.

The unique skull of *Pliosaurus grandis* and the mandible of another Pliosaur, from the Kimmeridge Clay of Dorset, were presented by Mr. J. C. Mansel (afterwards Mansel-Pleydell). Important remains of *Scelidosaurus* and *Plesiosaurus*, with various fishes, Crustacea and Mollusca, from the Lower Lias of Charmouth, were purchased from Mr. James Harrison.

Some Cretaceous fishes collected in the Lebanon by Rev. Canon H. B. Tristram, were acquired by purchase.

Among Invertebrata, the Saxby Collection, consisting chiefly of Cretaceous Mollusca from the Isle of Wight, was purchased. A nearly complete body of *Pterygotus anglicus*, from the Lower Old Red Sandstone of Forfarshire, was presented by Mr. James Powrie.

Some Devonian plants from North America were presented by Dr. J. W. (afterwards Sir William) Dawson.

Total number of acquisitions, 10,079.

1866.

Another collection of Mammalian remains, including evidence of a new gigantic kangaroo, *Palorchestes*, from the Pleistocene of Queensland, was presented by Sir Daniel Cooper, Bart. Other remains of *Scelidotherium* and *Myiodon*, with a nearly complete carapace and other fragments of *Glyptodon*, from the Pampa formation of Buenos Ayres, were purchased.

Additional Reptilian remains from the Kimmeridge Clay of Dorset were presented by Mr. J. C. Mansel (afterwards Mansel-Pleydell). A fine example of a new Plesiosaur (*Plesiosaurus laticeps*), a small *Ichthyosaurus communis*, and other remains of reptiles and fishes from the Lower Lias of Dorset, were acquired by purchase.

Skulls of *Capitosaurus* and *Trematosaurus* from the Trias of Würtemberg, and a fine skeleton of *Archegosaurus decheni*, from the Lower Permian of Rhenish Prussia, were also purchased.

A collection of Cretaceous fossils from Bogota, a series of Tertiary shells from the Vienna Basin, and some Silurian Invertebrata collected by Dr. Gustaf Lindström in Gotland, were among the most important purchases of Invertebrata. A collection of Arenig fossils from Pembrokeshire was presented by Dr. Henry Hicks and Mr. J. W. Salter.

Total number of acquisitions, 4061.

1867.

A large series of vertebrate fossils from the collection of the late Dr. Hugh Falconer, was presented by Mr. Charles Falconer. It comprised numerous remains of Proboscidea, the skull of an Irish Deer, bones and teeth of *Hippopotamus* from Sicilian caverns, and a skull of *Crocodylus bombifrons* from the Siwalik formation of India.

The type-skull of *Dinotherium giganteum*, the type-skull of *Dorcatherium navi*, and the type-jaws of *Tapirus priscus* from the Pliocene of Eppelsheim, Hesse-Darmstadt, were obtained by exchange with Dr. T. Oldham, who had purchased them from Dr. Kaup.

A fine head of *Ichthyosaurus platyodon*, from the Lower Lias of Lyme Regis, a Pliosaurian paddle from the Portland Stone, a Pterosaurian wing-bone from the Purbeck Beds of Dorset, and a series of reptilian and fish-remains from the Neocomian Phosphate Bed of Potton, Bedfordshire, were purchased.

Among Invertebrata several specimens figured in Sowerby's "Mineral Conchology" were acquired by purchase towards the completion of the Sowerby Collection. Other type-specimens described in the Monographs of the Palæontographical Society by Sharpe, Morris and Lycett, Edwards and Haime, and Duncan, were purchased. A few additional specimens figured in Dixon's "Geology of Sussex"; Cambrian Trilobites described by Belt (*Geol. Mag.*, vols. iv. and v.); *Neolimulus falcatus* described by H. Woodward (*Geol. Mag.*, vol. v.); and a few Carboniferous Crinoids described by Fort-Major Thomas Austin, were also purchased. Three type-specimens of Brachiopods from the Neocomian of Upware, Cambridgeshire, were presented by Mr. J. F. Walker. A series of fossil insects enclosed in amber from the Baltic coast was purchased.

A series of Middle Eocene plant-remains, collected by Mr. Wm. Stephen Mitchell, from Alum Bay, Isle of Wight, was obtained by the aid of a grant from the British Association. Microscope-sections of fossil plants, made by Mr. William Nicol, were purchased from Mr. James Bryson. Carboniferous plants from Kosloo, on the Black Sea, and from Nagpur, India, were also purchased.

Total number of acquisitions, 9156.

1868.

Various important Mammalian remains, noticed by the late Dr. Falconer in his "Palæontological Memoirs," were received as donations. Among these were some Pleistocene Mammalia from the Gower Caves, Glamorganshire, presented by Col. E. R. Wood; an upper jaw of *Rhinoceros etruscus* from Tejares, Malaga, Spain, presented by Prof. D. T. Ansted; and a mandibular ramus of *Mastodon andium*, from Chili, presented by the Trustees of the Canterbury Museum. Remains of *Trogontherium*, described in

Owen's "British Fossil Mammals," were presented by Sir Charles Lyell, Bart.

Valuable acquisitions by purchase, from the Lower Lias of Lyme Regis, included the greater part of the skeleton of a Pterodactyl, *Dimorphodon macronyx*, and a nearly complete skeleton of *Ichthyosaurus tenuirostris*—both subsequently described by Owen in the Monographs of the Palæontographical Society. The type-skull of *Placodus gigas* from the Bavarian Muschelkalk was also purchased. Mr. Mansel-Pleydell continued his donations of Kimmeridgian Reptilian remains.

An important small collection of Vertebrata, including the skeleton of a Rodent, remains of *Coluber*, *Crocodylus*, and *Palæobatrachus*, from the Miocene Lignite of Rott, near Bonn, was purchased. With this collection were about 150 fossil insects, including many described by Von Heyden and H. Hagen in *Palæontographica*, vols. viii., x., and xiv.

A very fine slab of *Pentacrinus fossilis* from the Lower Lias of Lyme Regis, and many Hippurites from the Cretaceous of Aude, France, were purchased. Some type-specimens of brachiopods, from the Neocomian of Upware, were presented by Mr. J. F. Walker.

Purchases of fossil plants included specimens from Clallam Bay, Washington Territory, U.S.A. ; from Vancouver ; and from Skedegate Bay, Queen Charlotte's Islands.

Total number of acquisitions, 10,372.

1869.

A valuable collection of remains of Prehistoric Mammalia from a freshwater deposit in the valley of the Lea, near Walthamstow, Essex, was obtained by purchase from Mr. Joseph Wood. In addition to human remains, it comprised bones and teeth of wolf, fox, beaver, horse, wild-boar, red deer, roebuck, fallow deer, reindeer, elk, ox, and goat. The discovery was described by Dr. H. Woodward (*Geol. Mag.*, vol. vi. 1869).

Mr. J. C. Mansel-Pleydell continued his donations of Kimmeridgian Reptilia, presenting this year the type-specimens of *Ischyrosaurus manseli* and *Steneosaurus manseli*, described by Mr. J. W. Hulke. The unique tail of the Pterodactyl, *Dimorphodon macronyx*, from the Lower Lias of Lyme Regis, described by Prof. Owen, was purchased with various other English Reptilian remains.

The collection of fossil Fishes was enriched by the purchase of

a series of specimens from the Oligocene slates of Canton Glarus, Switzerland, finely prepared by Emile Meyrat. The unique jaw of an extinct Cestracient from the Oolite of Caen, Normandy, described as *Strophodus medius* by Owen, and showing for the first time the arrangement of the *Strophodus*-teeth in the mouth, was also purchased. Some English Chalk fishes, notably a head of *Pachyrhizodus gardneri*, were included in the Toulmin Smith Collection mentioned below.

Among fossil Invertebrata, Dr. W. T. Blanford presented an important series, chiefly Jurassic, collected by him in Abyssinia. The second instalment of the collection of Mr. John Gray, of Hagley, comprising Upper Silurian trilobites, crinoids, and corals, was purchased. Other Wenlock Limestone fossils from Dudley were purchased from Mr. Charles Ketley. A large collection of English Jurassic fossils was purchased from Mr. R. Etheridge. The late Mr. Toulmin Smith's collection of Cretaceous sponges, including the originals of his own descriptions, was purchased from his executors. Many Crag Mollusca from Norfolk and Suffolk, including type-specimens described in Mr. Searles Wood's "Supplement," were purchased from Mr. Edward Charlesworth. A collection of Miocene Mollusca from Maryland, U.S.A., was also purchased. About 150 bivalved Crustacea, purchased from Prof. T. Rupert Jones, illustrated his "Monograph of the Fossil Estheriae."

A large series of Tertiary leaves, collected by Mr. Edward Whymper in Greenland, by means of grants from the British Association and the Royal Society, was presented by Mr. Robert H. Scott.

Total number of acquisitions, 7226.

1870.

A complete skeleton of the hornless female Irish Deer, *Cervus hibernicus*, was purchased from Dr. E. P. Wright. Numerous teeth of Pliocene Mammalia from a cavern near Ching-King-Foo, China (some described by Prof. Owen in *Quart. Journ. Geol. Soc.* vol. xxvi.), were purchased from Mr. Swinhoe, of Formosa. A series of Marsupial remains from the Wellington Caves, New South Wales, was presented by the Trustees of the Australian Museum, Sydney; and other bones from the same caves were presented by Prof. A. M. Thomson.

Two eggs of *Aepyornis* from Madagascar were purchased. Bones of *Dinornis casuarinus* from Glenmark Swamp, New Zealand,

were presented by Mr. W. Reeve; while gizzard-stones and tracheal rings of Dinornithidæ were presented by Prof. Owen.

The type-specimen of *Plesiosaurus manseli* from the Kimmeridge Clay of Dorset, was presented by Mr. J. C. Mansel-Pleydell; and numerous other remains of reptiles and fishes from the same formation, and from the Neocomian bone-bed of Potton, Bedfordshire, were purchased.

A collection of Labyrinthodonts, with a few fishes, from the Coal Measures of Jarrow Colliery, Kilkenny, Ireland, was purchased from Mr. W. B. Brownrigg. The Thomas Baugh Collection, chiefly consisting of fish-teeth from the Carboniferous Limestone of Shropshire, and the Charles W. Peach Collection of Old Red Sandstone Fishes from Caithness, were also acquired by purchase.

Among important purchases of fossil Invertebrata may be mentioned some specimens of *Placocystis* from the Wenlock Limestone; a fine *Apiocrinus* from the Bradford Clay of Wiltshire; type-specimens of Cretaceous and Tertiary Entomostraca, including the Bosquet Collection; Oolitic fossils from Brora, Sutherland; and a series of Tertiary shells collected by Mr. Hauxwell in the valley of the Amazon, and described by Dr. H. Woodward (*Ann. & Mag. Nat. Hist.*, ser. 4, vol. vii.).

Silicified wood from the desert near Cairo, described by Mr. Carruthers as *Nicolia oweni*, was presented by Prof. Owen. A fine Araucarian stem from the Lower Lias of Lyme Regis was purchased. A large series of plant-remains, from the Coal Measures of the Forest of Wyre, was included in the Baugh Collection.

Total number of acquisitions, 7620.

1871.

The most important acquisition of this year was the collection of the late Prof. Van Breda, of Haarlem, purchased from his executors. It comprised fossils from the Miocene of Oeningen, the Lignites of Rott, near Bonn, the Upper Cretaceous of Maastricht, the Lithographic Stone of Bavaria, the Keuper of Würtemberg, and the Permian of Thuringia. From all these horizons there were unique type-specimens of Vertebrata, besides numerous Invertebrata.

The Wetherell Collection, chiefly of London Clay fossils, purchased from Mr. N. T. Wetherell, was also of great value, comprising many type-specimens described by Edwards, Bell, Owen, and Darwin.

Series of Pleistocene Mammalian remains from Queensland, presented by Mr. Richard Daintree, and from Buenos Ayres, presented by Señor Luis J. Fontana, included many important new specimens. Remains of beaver from the Cambridgeshire Fens were purchased.

The type upper jaw of *Teleosaurus megarhinus*, from the Kimmeridge Clay of Dorsetshire, was presented by Mr. J. C. Mansel-Pleydell. The type-specimen of the extinct Chimeroid, *Ischyodus orthorhinus* of Egerton, from the Lower Lias of Lyme Regis, was purchased.

Some Upper Silurian Crinoids, Cystideans, Trilobites, other Crustacea, and two Starfishes, were purchased from the collection of Samuel Allport. Some Ordovician Trilobites from North Wales, including the type-specimens of *Calymene daviesi* and *Ogygia angustissima* and other specimens figured by Salter, were purchased from Mr. G. Davies. Polished sections of Carboniferous Corals, prepared with a grant from the British Association, were presented by Mr. James Thomson. A huge ammonite, 39 inches in diameter, and regarded as *Psiloceras planorbe*, from the Lias near Rugby, was purchased. (See "Mem. Geol. Surv. U.K., Jurassic Rocks," iii., p. 163.)

A few slabs of shale with fossil plants from the Coal Measures of Rhymney, South Wales, were presented by Mr. Coles Child.

Total number of acquisitions, 4789.

1872.

After the death of Sir Roderick I. Murchison, a selection from his collection was presented by his nephew and heir, Mr. Kenneth Murchison. Besides an extensive series of Invertebrata, chiefly Devonian and Silurian, it comprised many fossil fishes, among others the type-specimen of *Aechmodus leachi* from the Lower Lias of Lyme Regis.

Pleistocene Mammalian remains from Queensland and Buenos Ayres were presented by Dr. George Bennett and Señor L. J. Fontana respectively.

A footprint of *Dinornis* in modern beach-sandstone from New Zealand, was presented by Mr. T. H. Cockburn Hood.

Reptilian remains from the Karoo formation of Cape Colony, including *Pariasaurus*, *Tapinocephalus*, and *Galesaurus*, were presented by Dr. W. Guybon Atherstone. A fine Ichthyosaurian head from the Lower Lias of Lyme Regis, and a complete shell

of *Pleurosternum* from the Purbeck beds of Swanage, were purchased.

A unique specimen of the extinct Chimaeroid fish, *Squaloraja polyspondyla*, described by Mr. W. Davies (*Geol. Mag.*, vol. ix., 1872), was acquired by purchase.

The first instalment (Univalves) of the F. E. Edwards Collection of Eocene Mollusca from the south-east of England, including the specimens described in Mr. Edwards' Monograph published by the Palæontographical Society, was purchased.

Total number of acquisitions, 36,986.

1873.

The valuable general collection of fossils made by Dr. Bright of Bristol was presented by Mr. Benjamin Bright.

Among Mammalia the most noteworthy addition was a series of remains of pigmy elephants, collected and described by Dr. A. Leith Adams, and acquired by purchase from him. A cranium and other bones of the Miocene Sirenian, *Halitherium*, from Hesse-Darmstadt, were also purchased. Some Pleistocene Mammalian remains from the Porcupine River, Canada, were presented by Rev. Robert Macdonald. Dr. George Bennett's donations of fossil Marsupialia from Queensland were continued.

The unique skull of the bird with denticulated jaws, *Odontopteryx toliapica*, from the London Clay of Sheppey, was purchased from Mr. B. M. Wright.

Some Reptilian remains from the Kimmeridge Clay of Weymouth, including a large humerus described by Mr. Hulke as *Cetiosaurus humerocristatus*, were acquired by purchase. Half of the type-specimen of *Dolichosaurus longicollis* from the Chalk of Kent, was also purchased.

A unique specimen of *Pteraspis crouchi*, showing scales, from the Lower Old Red Sandstone of Worcestershire, was presented by Prof. E. Ray Lankester.

The second instalment of the F. E. Edwards Collection of English Eocene Mollusca, comprising over 13,000 specimens, was purchased. Numerous British fossil Invertebrata from the collections of Mr. S. Allport and Rev. Charles Croft, were also purchased. A remarkable group of star-fishes, *Oreaster bulbiferus*, from the Upper Chalk of Bromley, Kent, was prepared by Jeremiah Simmons and sold by him to the Museum.

Total number of acquisitions, 18,501.

1874.

Remarkable additions to the series of British Pleistocene Mammalia were made this year by the purchase of Sir Antonio Brady's collection from the Thames Brick-earth at Ilford, Essex, and Mr. J. J. Owles' collection obtained from trawlers off the eastern coast, especially from the Dogger Bank. Valuable remains of Marsupialia from the Pleistocene of Queensland, were received as donations from Dr. George Bennett and others. The jaws of the extinct ungulate, *Homalodontotherium cunninghami*, from the Tertiary of Patagonia, described by Sir William Flower (*Phil. Trans.* 1874), were presented by the Lords of the Admiralty through Dr. Cunningham. The unique skull of the primitive Sirenian, *Prorastomus sirenoides*, from Jamaica, was presented by Prof. (afterwards Sir Richard) Owen.

A nearly complete skeleton of *Dinornis maximus*, now exhibited in the Department of Zoology, was obtained by exchange with the Canterbury Museum, Christchurch, New Zealand.

A large part of the skeleton of a gigantic Dinosaur, described as *Omosaurus armatus* by Owen, was dug out of the Kimmeridge Clay at Swindon by Mr. William Davies, and presented to the Museum by the Directors of the Swindon Brick and Tile Company.

An extensive series of fish-remains from the Lower Old Red Sandstone and Upper Silurian of the neighbourhood of Ludlow, including several type- and described specimens, was presented by Mr. Robert Lightbody. The first well-preserved fossil fish, a Palæoniscid, from the Karoo Formation of Cape Colony, was presented by the Trustees of the Albany Museum.

A series of Tertiary fossils from the Sinai peninsula and Egypt was collected and presented by Prof. John Milne. A fine collection of Crinoidea from the Lower Carboniferous of Burlington, Iowa, U.S.A., was purchased from Mr. C. Wachsmuth. A slab of *Eozoon canadense* from Canada was also purchased.

Total number of acquisitions, 3103.

1875.

Another large instalment of the Cunningham Collection was purchased, including Mammalian remains from Wookey Hole, *Pleurosternum* from the Purbeck Beds, fishes from the Purbeck

Beds and Kimmeridge Clay, and numerous Crustacea, Echinoderma, Mollusca, Brachiopoda, and Sponges, of which many were type-specimens described in the Monographs of the Palæontographical Society.

Numerous fossil Mammalia from the Red Crag of Suffolk were purchased from Mr. E. Charlesworth. A natural cast of a Sirenian brain, *Eotherium aegyptiacum*, from the Eocene of Egypt, was presented by Prof. (afterwards Sir Richard) Owen. Bones of ox, stag, wild-boar, and beaver from the excavations for the Thames Embankment, Westminster, were presented by the Metropolitan Board of Works. Marsupial remains from Queensland and New South Wales were presented by Dr. George Bennett and Mr. W. L. R. Gipps.

Various described bones of *Cnemidornis*, *Aptornis*, and other birds from the surface deposits of New Zealand, were presented by Prof. Owen. Bones of the Great Auk, discovered by Prof. John Milne in Funk Island, off Newfoundland, were purchased.

A small, but valuable collection of Cretaceous fishes from Mount Lebanon was purchased.

An important collection of fossils from New Zealand, chiefly Cretaceous and Cretaceous-Tertiary Invertebrata, was presented by Dr. (afterwards Sir James) Hector. About 5000 English, French, North German, and Austrian Tertiary Mollusca, from the collection of the late F. E. Edwards, were purchased.

Specimens of *Glossopteris* and silicified wood from New South Wales were presented by Mr. W. L. R. Gipps.

Total number of acquisitions, 10,711.

1876.

Some valuable collections of fossil Mammalia from caverns were obtained this year. The results of the Brixham Cave exploration, described in *Phil. Trans.* 1873, were presented by the Council of the Royal Society. A few remains from the Oreston Caves, near Plymouth (obtained by the late Mr. Joseph Cottle of Bristol), were purchased. A large collection made by the late Captain Fox Brome in caverns and fissures in the rock of Gibraltar, described by Prof. Busk (*Trans. Zool. Soc.*, vol. x. 1877), was presented by the Governor of Gibraltar.

A collection of Mammalian remains from the Middle Purbeck Beds, Durdlestone Bay, Dorsetshire, described in Owen's

"Mesozoic Mammalia" (Mon. Pal. Soc., 1871), was purchased from Mr. S. H. Beckles.

A skull of *Dicynodon leoniceps* and another fragment of the same, from the Karoo Formation of Cape Colony, were presented by the Hon. W. Guybon Atherstone.

A series of freshwater Tertiary fish-remains from Padang, Sumatra, described by Dr. Günther (*Geol. Mag.*, 1876), was presented by Herr R. D. M. Verbeek.

The important collection of Mr. Samuel Sharp, chiefly consisting of Invertebrata from the Jurassic of Northamptonshire, was acquired by purchase. Six Oligocene shells from Brockenhurst, figured in Wise's "New Forest" (1863), were presented by Mr. John R. Wise. Numerous Pliocene Mollusca from Sicily, and Tertiary Mollusca from the Amazons, were purchased. A collection of fossil corals from the Carboniferous Limestone of Clifton, was presented by Mr. Swinfen Jordan.

Some specimens of *Glossopteris* from Natal were presented by Rev. George Smith.

Total number of acquisitions, 5531.

1877.

The most important acquisition of this year was a general collection of fossils presented by the Hon. Robert Marsham (now Marsham-Townsend). Besides many unique and valuable English fossils, it included some Cretaceous fishes from Ceara, North Brazil.

Mr. Charles Falconer added to his former donation (1867) some Mammalian remains from the Siwalik Hills, India, and other localities, also some Tertiary shells and cycads from India. Dr. George Bennett presented additional specimens of Marsupialia from Queensland, and Rev. W. B. Clarke presented the type-jaw of *Sthenurus minor* of Owen from New South Wales.

Some Reptilian remains, including the type-specimens of *Echinodon becklesi* described by Sir Richard Owen, from the Purbeck Beds of Durdlestone Bay, were purchased from Mr. S. H. Beckles.

A second series of Cretaceous fishes from the Lebanon was purchased.

A collection of Miocene plant-remains from Haring, Tyrol, including specimens described by Baron von Ettingshausen, was purchased.

Total number of acquisitions, 4702.

1878.

A valuable collection of Vertebrata from the caverns and rock-fissures of Malta was presented by Rear-Admiral T. A. B. Spratt. It comprised remains of pigmy elephants described by Busk (*Trans. Zool. Soc.*, vol. vi.), and fragments of *Chelonia* described by Leith Adams (*Quart. Journ. Geol. Soc.*, vol. xxii.); also some remains of birds subsequently described by Lydekker (*Proc. Zool. Soc.*, 1890).

A skull of *Toxodon platensis* from the Pampa of Buenos Ayres was purchased from Mr. Frank Day. A rostrum of *Ziphius planirostris*, dredged off Southwold, was presented by Dr. C. R. Bree.

The type-skull of *Steneosaurus stephani*, from the Cornbrash of Dorset, was purchased from Mr. Darell Stephens. A fine Plesiosaurian skull, from the Lower Lias of Charmouth, was purchased from Rev. T. L. Montefiore.

The collection of fossils from the English Chalk, made by the late Mrs. Smith, of Tunbridge Wells, was purchased from Mrs. Bishop. It included several valuable reptilian and fish remains, besides Invertebrata, figured in Dixon's "Geology of Sussex." Some Cretaceous fishes, Crustacea, &c., collected by Rev. Prof. E. R. Lewis in the Lebanon, were purchased from Mr. R. Damon.

A few conodonts from the Sub-Carboniferous of Ohio were presented by Dr. G. J. Hinde.

Mr. John Rofe's collection of Carboniferous Limestone fossils, chiefly Crinoidea, was presented partly by himself, partly by his executor. Some Upper Silurian Crustacea from Lanarkshire, were purchased from Dr. Robert Slimon. A few fossil shells and fish-teeth from the Tertiary of Coquimbo, Chili, were presented by Mr. C. J. Lambert.

Numerous Palaeozoic Invertebrata, shells from Raised Beaches, and Tertiary leaves, collected by Captain H. W. Feilden while with the Nares Expedition (*H.M.S.S. Alert and Discovery*) in the Arctic Regions, were presented by the Lords of the Treasury.

A large collection of Tertiary plant-remains from Austria, including many type- and described specimens, was purchased from Baron Constantin von Ettingshausen. A few Tertiary leaves from Euboea were purchased from Mr. R. Damon.

Total number of acquisitions, 6379.

1879.

A bequest from the late Sir Walter C. Trevelyan, Bart., added many important British fossils and some Tertiary shells from Italy. The purchase of the collection of English Chalk fossils made by Mr. J. Rand Capron, also formed a valuable acquisition this year.

A skull of *Bos primigenius* from Ilford was acquired by purchase. Four teeth of *Ovibos moschatus* from Thames deposits near Crayford, Kent, were presented by Mr. R. W. Cheadle. A series of vertebrate remains and freshwater shells, obtained by a Committee from the caverns of Borneo, was presented by the Council of the British Association.

Numerous fossil Invertebrata from Australia were presented by Mr. R. L. Jack, Mr. H. Y. Lyell Brown, and the executor of Mr. Richard Daintree. Some Lower Silurian Graptolites from Victoria, described by Mr. R. Etheridge (*Ann. Mag. Nat. Hist.*, 1876), were purchased from Mr. Philip Ewen.

Some Tertiary Mollusca from the Upper Amazons, described by Mr. Etheridge (*Quart. Journ. Geol. Soc.*, vol. xxxv., 1878), were presented by Mr. C. Barrington Brown.

Additional fossil plant-remains from Austria, including some type-specimens, were purchased from Baron von Ettingshausen.

Total number of acquisitions, 4555.

1880.

The largest accession this year was due to the transfer of about 50,000 non-British fossils from the Museum of Practical Geology, Jermyn Street.

The type mandibular ramus of *Chæropotamus cuvieri*, from the Eocene of Seafield, Isle of Wight, was presented by Rev. W. D. Fox. Some Pleistocene Mammalian remains from San Angelo, Mexico, were presented by Mr. Patrick Geddes.

The type-skeleton of *Dinornis parvus*, from New Zealand, was purchased from Mr. W. J. Upton. The skull of *Argillornis longipennis*, a bird from the London Clay of Sheppey, was purchased from Mr. W. H. Shrubsole.

The type-skull of the horned tortoise, *Miolania oweni*, from the Pleistocene of Queensland, was presented, with associated vertebrate remains, by Mr. G. F. Bennett. A nodule of Lower Lias from Bennington, containing part of a skeleton of *Plesio-*

saurus noticed in Nichols' "History of Leicestershire," was presented by Major Harlowe Turner. A plaster cast of the type-specimen of *Plesiosaurus cramptoni*, in the Dublin Museum, was acquired by purchase. A Teleosaurian skull from the Upper Lias of Whitby, and the type-specimen of *Pelobatochelys blakei*, from the Kimmeridge Clay of Weymouth, were purchased from Prof. J. F. Blake. The type-skull of *Chelone gigas*, from the London Clay of Sheppey, was purchased from Mr. W. H. Shrubsole. Eggs of turtles from a consolidated beach in the Island of Ascension, were presented by Lieut. Haggard, R.N.

The Weaver Jones Collection of Carboniferous and Old Red Sandstone fish-remains from the West of England, was acquired by purchase. Many well-preserved fishes collected by Mr. Jex in the Lower Old Red Sandstone of Forfarshire, were purchased from Mr. R. Damon.

A large collection of English Cretaceous fossils was purchased from Mr. J. S. Gardner. The James Armstrong Collection of Lower Carboniferous fossils from the Glasgow district, was also purchased. Some Tertiary fossils from Patagonia were presented by Dr. R. W. Copping. Palæozoic fossils from Bolivia were presented by Mr. R. Inwards; similar fossils from New South Wales were presented by Prof. A. Liversidge; others from Tasmania were purchased from Mr. P. J. Smith. A collection of New Zealand fossils was purchased through Dr. (afterwards Sir James) Hector. Devonian fossils from Belgium were purchased from Mr. G. E. Gavey. A collection of Silurian Entomostraca was purchased from Prof. T. Rupert Jones; and a collection of American Carboniferous Echinoderms, from Mr. R. Damon.

An important collection of English Eocene plant-remains was purchased from Mr. J. S. Gardner. Fossil wood and leaves from the Mackenzie River, Canada, described by Prof. O. Heer, were presented by the Council of the Royal Society.

Total number of acquisitions, 55,496.

1881.

A few bones of *Elephas*, from the Pleistocene of Belgrade, were purchased from Mr. E. M. Grant.

Plaster casts of some detached bones of the type-specimens of toothed birds (*Hesperornis*, *Ichthyornis*), from the Chalk of Kansas, were presented by Prof. O. C. Marsh.

Two remarkable skeletons of *Neusticosaurus pusillus*, collected

from the Upper Trias of Würtemberg by Mr. Julius Hoser, were acquired by purchase. The type-skull of *Aelurosaurus felinus*, from the Karoo formation of South Africa, was presented by Mr. Thomas Bain. The bony tail-sheath of *Miolania oweni*, from the Pleistocene of Queensland, was presented by Mr. G. F. Bennett.

Jaws of *Prognathodus guentheri* (= *Myriacanthus paradoxus*), from the Lower Lias of Lyme Regis, described in "Catal. Foss. Fishes, B. M.," pt. ii., were purchased from Mrs. H. Dollin.

The collection of Tertiary and Cretaceous fossils made by the late Mr. W. Harris, of Charing, was purchased from his daughter. A collection of English Chalk fossils was presented by the Earl of Ducie. An extensive selection from the miscellaneous collection of the late Prof. J. Tennant, was purchased from his executors. Cretaceous fossils from Bahia, Brazil, were presented by Mr. Joseph Mawson. A collection of Menevian fossils from St. David's, was purchased from Mr. R. Damon.

Some fossil corals from Sind, described by Prof. P. Martin Duncan, were presented by the Director of the Geological Survey of India. A fine slab of Devonian Crinoidal Limestone from Newton Bushell, South Devon, was presented by Mr. W. Vicary.

Diatoms from the London Clay were presented by Mr. W. H. Shrubsole. Coal-plants from St. Étienne, France, were presented by Mr. C. Chantre.

Total number of acquisitions, 1936.

1882.

The most important acquisitions this year were the collections of the late Sir Philip de Malpas Grey Egerton, Bart., Trustee British Museum, and of the Earl of Enniskillen (first instalment), which were obtained by purchase. These collections, which were made conjointly, consisted chiefly of fossil fishes, but also included many other valuable specimens.

The dried neck and legs of *Dinornis didinus*, showing skin and other soft parts, from a fissure in New Zealand, were purchased from Mrs. Squires. Some fragments of *Aepyornis* from Madagascar were presented by Mr. James Porter.

The collection of Wealden Reptilia from the Isle of Wight, made by the late Rev. W. Fox, was purchased from his executors. The type-specimen of *Thecospondylus horneri*, from the Wealden of Tunbridge Wells, was presented by Dr. A. C. Horner. A

fine head of *Ichthyosaurus platyodon*, and other valuable remains of reptiles and fishes from the Lower Lias of Lyme Regis, were presented by Sir F. Seymour Haden. Eggs of turtles from a consolidated beach in the Island of Ascension, were presented by Surgeon T. Conry, R.N.

Another selection from the collection of the late Prof. J. Tennant, was purchased; and numerous British fossils were presented by Mrs. Burnett. Welsh Silurian and Cambrian fossils were presented by Mr. David Homfray. Tertiary shells from Dalmatia and Croatia, were presented by Prof. S. Brusina; from Bordighera, by Mr. J. G. Goodchild. Tertiary fossils from Gippsland, Victoria, were presented by Mr. W. H. Grigson. Mesozoic fossils from Japan, were presented by Prof. John Milne; from Bahia, Brazil, by Mr. Joseph Mawson. A large collection of fossil Entomostraca and Foraminifera (including Lonsdale's specimens from Portsdown), was purchased from Prof. T. Rupert Jones.

Another large collection of fossil plants from Austria was purchased from Baron Constantin von Ettingshausen.

Total number of acquisitions, 16,316.

1883.

The second and final instalment of the collection of the Earl of Enniskillen was purchased. Among miscellaneous specimens, this included a complete skeleton of the Irish Deer (*Cervus giganteus*), and the type-specimen of *Plesiosaurus macrocephalus* from the Lower Lias of Lyme Regis.

A large selection from the series of remains of Pleistocene Mammalia and implements collected by Mr. Pengelly while exploring Kent's Cavern, Torquay, under the direction of a Committee of the British Association, was presented by Lord Haldon and the Council of the British Association.

The first part of an important collection of fossil Mammalia from the Oligocene Phosphorites of Caylux and other localities in S. France, was purchased from Mr. B. Stürtz. Remains of an Irish Deer (*Cervus giganteus*) from Russia, were purchased from Mr. P. A. Holst. A carapace of the extinct armadillo, *Hoplophorus ornatus*, from Buenos Ayres, was purchased from Mr. E. Gerrard.

Part of the upper jaw of *Megalosaurus bucklandi*, from the Inferior Oolite of Sherborne, Dorset, described by Owen (*Quart.*

Journ. Geol. Soc., vol. xxxix., 1883), was presented by Mr. E. Cleminshaw. Plaster casts of *Rhamphorhynchus phyllurus* and a femur of *Atlantosaurus immanis* were presented by Prof. O. C. Marsh.

Some Pteraspidian fishes, including the type-specimen of *Holaspis sericeus*, from the Lower Old Red Sandstone of Herefordshire and Monmouthshire, were presented by Dr. D. M. MacCullough. The type-specimens of *Semionotus capensis* from the Stormberg beds (Trias or Rhætic) of South Africa were presented by Dr. Hugh Exton. Lower Carboniferous fishes from Eskdale (Jex Coll.) and Upper Cretaceous fishes from the Lebanon (Lewis Coll.) were purchased from Mr. R. Damon.

Brachiopoda from the Wenlock Shale of Shropshire were presented by Mr. J. F. Walker. Graptolites and micro-sections of tabulate corals were purchased from Prof. H. A. Nicholson. Devonian star-fishes from Bundenbach, Rhenish Prussia, were purchased from Mr. F. Braun. Corals and Stromatoporoids from the Devonian of Torquay were presented by Mr. E. B. Luxmoore. Carboniferous corals from Northumberland were presented by Prof. H. A. Nicholson. A few bivalved shells from the Coal Measures of Staffordshire, were presented by Mr. John Ward. Some Liassic insects were presented by Rev. P. B. Brodie. A collection of Post-Tertiary fossils from the Clyde was presented by Dr. David Robertson.

Total number of acquisitions, 14,575.

1884.

The second portion of the collection of fossil Mammalia from the Oligocene Phosphorites of Caylux and other localities in S. France, was purchased from Mr. B. Stürtz. A plaster cast of the restored skeleton of *Halitherium schinzi*, from the Lower Miocene of Hesse Darmstadt, was purchased from Prof. R. Lepsius. Marsupial bones from river deposits in King's Creek, Queensland, were presented by Mr. C. H. Hartmann. Mammalian remains from Pen Park Cave, Westbury-on-Trym, were presented by Mr. Spencer G. Perceval. The type-tooth of *Macacus pliocenus* from Grays, Essex, and other Mammalian remains, were presented by Sir Richard Owen. The parts of a human skeleton, described by Owen, from Thames mud at Tilbury Docks, were presented by the Directors of the E. and W. India Docks Co.

A fine skeleton of *Ichthyosaurus tenuirostris*, from the Lower Lias of Street, Somersetshire, was presented by Mr. Alfred

Gillett. A collection of bones of *Iguanodon* and *Goniopholis*, with a few fish-remains, from the Wealden of Sussex, was purchased from Mr. Charles Dawson. The type-specimens of *Tritylodon* and *Rhytidosteus* from the Stormberg Beds, Orange River Colony, were obtained by exchange with the Bloemfontein Museum. A unique uncrushed skull of *Loxomma allmanni*, from the Coal Measures of Coalbrookdale, was presented by Mr. George Maw.

Numerous fossil fishes from the Upper Cretaceous of the Lebanon (E. R. Lewis Coll.) and from the Kimmeridgian of Cirin, Ain, France, were purchased from Mr. R. Damon. A gigantic fish-spine from the Carboniferous Limestone of Bristol, described by Mr. J. W. Davis under the name of *Phoderacanthus grandis*, was presented by the Earl of Ducie. The type-specimen of *Atherstonia scutata*, from the Karoo Formation of Cape Colony, was presented by the Hon. W. Guybon Atherstone.

A valuable miscellaneous collection of fossils, chiefly British, was presented by Mr. Charles Westendarp. Some Greensand fossils from Blackdown were presented by Mr. W. Vicary. Carboniferous and Devonian fossils from Devonshire were presented by Mr. J. E. Lee. Lower Carboniferous fossils from Scotland (James Armstrong Coll.) were presented by Prof. T. C. Archer. Silurian and Cambrian fossils from Wales were presented by Dr. H. Hicks. Eocene Ostracoda were presented by Prof. J. Morris; Post-Tertiary Ostracoda from the Clyde, by Dr. D. Robertson.

A continuation of the Gardner Collection of Lower Tertiary plants, with a series of other British Cretaceous and Tertiary fossils, was acquired by purchase.

Total number of acquisitions, 10,011.

1885.

The most important acquisition of this year was the extensive collection made by Mr. John Edward Lee and presented by him to the Museum. A miscellaneous collection was also presented by Prof. (afterwards Sir) Joseph Prestwich.

Pleistocene Mammalia from the Cae Gwyn and Ffynnon Beuno Caves, Vale of Clwyd, were presented by Dr. Henry Hicks and Mr. E. B. Luxmoore; from the Coygau Cave, Carmarthenshire, by Dr. Hicks; from Windy Knoll and the Creswell Caves, Derbyshire, by Prof. W. Boyd Dawkins. Part of the upper jaw of a young *Elephas* from the Creswell Caves was also presented by Mr. A. T. Metcalfe. Bones of Pleistocene

Mammalia, especially *Hippopotamus*, from Barrington, Cambridge, were purchased from Mr. H. Keeping. A nearly complete skeleton of *Rhytina gigas* from Behring Island, was purchased from Mr. R. Damon. A nearly complete skeleton of *Myiodon robustus*, from the Pampa of Buenos Ayres, was purchased from Mr. E. Gerrard. Plaster casts of Dinocerata, from the Eocene of North America, were presented by Prof. O. C. Marsh. Some *Mastodon* teeth from the Siwalik Formation of Perim Island were presented by Diwán Wajeshankar Gowreeshankar.

Additional remains of *Iguanodon* from the Wealden of Sussex were purchased through Mr. Charles Dawson. Specimens of *Stereosternum tumidum*, from the Permo-Carboniferous of San Paulo, Brazil, were purchased from Mr. B. Stürtz. Remains of *Miolania* from Lord Howe's Island were presented by Mr. R. D. Fitzgerald.

Some Elasmobranch teeth from the Yoredale Rocks of Wensleydale, Yorkshire, were purchased from Mr. W. Horne.

Small Silurian Brachiopoda from the Wenlock Shales were presented by Mr. George Maw. Culm Trilobites from Devonshire were presented by Dr. Henry Woodward. Devonian fossils from South Africa were presented by Mr. W. E. Balston. English Jurassic Corals were presented by Mr. R. F. Tomes. Jurassic and other fossils from Meux' boring and the Richmond boring in the London Basin, were presented by Prof. J. W. Judd. Cephalopoda from the Grey Chalk and Gault of the Kentish coast, were purchased from Mr. J. S. Gardner. Indian fossil Echinoids were presented by the Director of the Geological Survey of India. Miocene Mollusca from Morocco were presented by Mr. John Ball. English Crag Mollusca, from the Searles Wood Collection, were presented by Mrs. S. V. Wood. Mollusca from the Pliocene of St. Erth, Cornwall, were purchased from Mr. H. Keeping. Pliocene shells from Latakia, Syria, were presented by Dr. G. E. Post. Post-Tertiary Mollusca collected by Mr. J. S. Gardner at Húsavik, Iceland, were presented by the Council of the Royal Society.

Wealden plants from the neighbourhood of Hastings, were presented by Mr. Philip Rufford. Plants from the Radstock and Forest of Dean Coalfields, collected by Mr. R. Kidston, were presented by the Council of the Royal Society. Lower Tertiary plants from Ireland, collected by Mr. J. S. Gardner, were also presented by the Council of the Royal Society.

Total number of acquisitions, 40,662.

1886.

The most important acquisition of this year was the collection of Recent and Fossil Brachiopoda bequeathed to the Trustees by the late Dr. Thomas Davidson.

Remains of *Scelidotherium* from the Pleistocene of Tarapaca, Peru, subsequently described by Mr. R. Lydekker (*Proc. Zool. Soc.*, 1886), were presented by Señor Don Modesto Basadre. Marsupial remains from the Pleistocene of Queensland were presented by Dr. George Bennett. Proboscidian and other Mammalian teeth from the Siwalik Formation of Perim Island, Gulf of Cambay, were presented by Col. J. W. Watson. Some Pleistocene bones from the Karnul Caves, Madras, were presented by the Director of the Geological Survey of India. Bones of Rodentia and other small mammals from the caverns of Corsica, were purchased from Dr. Forsyth Major.

The fine skeleton of *Hyperodapedon gordonii*, from the Triassic sandstone of Elgin, subsequently described by Huxley (*Quart. Journ. Geol. Soc.*, vol. xliii., 1887), was presented by Rev. George Gordon. The counterpart of the type-specimen of *Lepidosaurus duffi*, from the Magnesian Limestone of Durham, was presented by Mr. W. C. Stobart. The type-specimen of *Clemmys watsoni*, from the Siwalik Formation of Perim Island, was presented by Col. J. W. Watson. A maxilla of *Iguanodon*, from the Wealden of Sussex, described by Mr. J. W. Hulke (*Quart. Journ. Geol. Soc.*, vol. xlii. 1886), was presented by Mr. Henry Willett.

Two Eocene fishes (*Diplomystus* and *Mioplosus*) from the Green River Shales of Wyoming, U.S.A., were presented by Sir John Lubbock, Bart. (now Lord Avebury).

The Henry Johnson Collection of Wenlock and Carboniferous fossils from the Dudley district, was acquired by purchase. A large collection of Palæozoic fossils from Devonshire was purchased from Mr. Townsend M. Hall. Silurian Corals and Trilobites from Yorke Peninsula, and Cretaceous and Tertiary fossils from various localities in South Australia, were presented by the Director of the Geological Survey of South Australia. British Cretaceous fossils were purchased from Mr. J. S. Gardner. Oligocene Mollusca from Headon Hill, Isle of Wight, and Pliocene Mollusca from St. Erth, Cornwall, were presented by Mrs. S. V. Wood. Additional Pliocene Mollusca from Latakia, Syria, were presented by Dr. G. E. Post. Tertiary Mollusca

from Muddy Creek, Victoria, were presented by Mr. J. Dennant. Fossil Mollusca from Greenland were purchased from Mr. E. Whymper. Two blocks of *Eozoon canadense* were presented by the Director of the Geological Survey of Canada. London Clay Foraminifera were purchased from Mr. C. D. Sherborn. The type-specimens of *Necroscilla wilsoni* and *Eoscorpis anglicus*, from the Coal Measures, were presented by Mr. Edward Wilson.

Tertiary plants collected by Mr. J. S. Gardner in the Island of Mull and Ireland, were presented by the Council of the Royal Society. Similar plants from Bournemouth and Alum Bay, England, and Chiavon, Italy, were purchased from Mr. J. S. Gardner. Tertiary plants from Greenland were purchased from Mr. E. Whymper.

Total number of acquisitions, 37,821.

1887.

Valuable additions to the collection of British fossils were made by the purchase of selections from the collections of the late Dr. Harvey B. Holl, Dr. Thomas Wright, and Mr. Caleb Evans.

A few more mammalian remains from the Siwalik Formation of Perim Island were presented by Col. J. W. Watson. A human calvaria, found in excavations for the docks at Tilbury, was presented by Mr. Donald S. Baynes.

Some feathers of *Dinornis* from New Zealand were purchased from Sir Walter Buller. Part of a skeleton of *Dinornis struthioides* was presented by Mr. N. Chevalier.

Additional Dinosaurian bones from the Wealden of Sussex were purchased through Mr. Charles Dawson. Some Dinosaurian bones from the Karoo Formation of S. Africa, *Euskelesaurus* and *Orosaurus*, Huxley (*Quart. Journ. Geol. Soc.*, vol. xxiii., 1867), were presented by Prof. T. H. Huxley.

A few Cephalaspidian fishes from the Ledbury Passage Beds were presented by Mr. G. H. Piper. Elasmobranch teeth from the Carboniferous Limestone of Ticknall, Derbyshire, were purchased from Mr. Edward Wilson. The type-specimen of *Holocentrum melitense*, from the Miocene of Malta, was purchased from the Duke of Argyll. Some nodules containing fishes, from Glacial Clay, Bindalen, Norway, were presented by Mr. Henry Tryon.

Miscellaneous rocks and fossils from a deep boring at

Richmond, Surrey, were presented by Mr. Colette Homersham. Palæozoic fossils from South Africa were presented by Mr. W. Carruthers ; from Western Australia, by Mr. E. T. Hardman. Mesozoic fossils from the Lake Eyre District were presented by the Director of the Geological Survey of South Australia. Tertiary fossils, chiefly Mollusca, from the Murray River, near Adelaide, South Australia, were presented by Mr. William Evans. Eocene Mollusca found between Cap d'Ailly and Dieppe, were presented by Colonel L. Worthington Wilmer. Oligocene fossils collected by Mr. Henry Keeping in the Isle of Wight were presented by the Council of the Royal Society. Post-Tertiary shells from the Solomon Isles were presented by Mr. H. B. Guppy and Dr. H. B. Brady. Carboniferous Crinoids and a specimen of *Pentacrinus fossilis* figured in Buckland's "Bridgewater Treatise" were presented by Rev. Canon J. E. Jackson.

Fossil plants collected by Mr. R. Kidston from the Somersetshire Coal Measures were presented by the Council of the Royal Society.

Total number of acquisitions, 8370.

1888.

A second selection from the collection of the late Dr. Thomas Wright was purchased from a dealer. Another valuable general collection of British fossils, including some almost unique Chalk fishes, was purchased from Mr. Frederick Harford. A collection of Cretaceous and Tertiary fossils, chiefly from Sussex, was presented by Mr. P. E. Coombe.

An important series of Mammalian remains, collected by Dr. Hans Pohlig in the Lower Pliocene deposits of Maragha, Persia, was purchased from a dealer. A carapace and other remains of *Glyptodon*, from the Pampa formation of Buenos Ayres, were also acquired by purchase. A model in *papier maché* of the skeleton of *Dinoceras mirabile*, from the Eocene of Wyoming, U.S.A., was presented by Prof. O. C. Marsh. A fine last lower molar of *Mastodon angustidens*, from the Red Crag of Foxall, Suffolk, was purchased from Mr. G. C. E. Ker.

Additional bones of Wealden Dinosaurs from Sussex were purchased through Mr. Charles Dawson. Footprints of *Iguanodon* from Hastings (figured *Quart. Journ. Geol. Soc.*, vol. x., 1854), were presented by Mr. S. H. Beckles. An imperfect

skeleton of *Metriorhynchus* from the Oxford Clay of Peterborough was presented by Mr. Alfred N. Leeds. Teleosaurian remains from the Great Oolite of Northampton were purchased from Mr. Thomas Jesson. Remains of Reptilia, Pisces, and Mollusca, from the Cretaceous of Bahia, Brazil, were presented by Mr. Joseph Mawson.

The first specimens of *Cladoselache*, a pectoral fin and a tail, from the Upper Devonian of Ohio, were presented by Prof. J. S. Newberry. Devonian fishes from Canada, collected by Mr. Jex, were purchased from Mr. R. F. Damon. The type-specimen of *Cleithrolepis extoni*, from the Karoo Formation of Orange River Colony, was presented by Dr. Hugh Exton. The type-specimen of *Thrissops portlandicus*, from the Portland Stone, was presented by Mr. Frederick Harford.

A miscellaneous collection of fish-remains, shells, etc., from the Eocene deposits north of the Sea of Aral, was presented by Mr. W. Bateson. Many microscope-slides of invertebrate fossils (*Parkeria*, etc.) were presented by Dr. John Millar and Mrs. Millar. Some Palæozoic fossils from Kashmir were presented by Colonel Godwin-Austen. Devonian and Silurian fossils from Galicia were presented by Prof. L. Szajnocha. Remains of Trilobites from the Penrhyn Slate Quarries, Bethesda, were presented by Mr. E. B. Luxmoore. Palæozoic Ostracoda were purchased from Mr. J. W. Kirkby; Fuller's Earth Ostracoda from Prof. T. Rupert Jones. Bracklesham Ostracoda were presented by Prof. J. W. Judd. The Robert G. Bell Collection of Crag Mollusca and Polyzoa was purchased from his executors. Bivalves from the Norwich Crag were presented by Mr. R. E. Leach. Several collections of Post-Pliocene Mollusca were received as donations, namely: one from Barnwell, Cambridge, presented by Mrs. McKenny Hughes; from Clapton, Essex, presented by Mr. J. E. Greenhill; from the Post-Pliocene Manure Gravels, Wexford, collected by Mr. Alfred Bell, presented by the Council of the British Association; from a raised beach at Uddevalla, Sweden, presented by Mr. R. M. Thorburn; from Japan, presented by Prof. John Milne. Foraminifera from Hungary were presented by Dr. Max von Hantken.

An additional collection of Austrian fossil leaves was purchased from Baron Constantin von Ettingshausen.

Total number of acquisitions, 12,576.

1889.

The most important acquisition this year was a series of Lower Pliocene Mammalia from the Island of Samos, collected by Dr. C. I. Forsyth Major and sold by him to the Trustees. A valuable collection of fossils from the Eocene and Jurassic of Madagascar, illustrating a paper by Mr. R. B. Newton (*Quart. Journ. Geol. Soc.*, vol. xlv., 1889), was presented by Rev. R. Baron. Miscellaneous collections of British fossils were presented by Mr. Frederick Harford and Mr. George Clifton; and another was purchased from Mrs. Baber.

A plaster cast of the type-specimen of *Phenacodus primævus*, from the Lower Eocene of Wyoming, was purchased from Prof. E. D. Cope. A plaster cast of a skull and mandible of *Brontops robustus*, from the Eocene of Wyoming, was presented by Prof. O. C. Marsh. Remains of Pleistocene Mammalia from the Bench Cavern, Brixham, near Torquay, were purchased from Mr. W. Else. A molar of *Elephas meridionalis* from Dewlish, Dorset, was presented by Mr. J. C. Mansel-Pleydell. An antler of an elk from Cleveland, Yorkshire, was presented by the Christy Trustees. A mandible of *Elephas primigenius* from Siberia (Cattley Collection) and a skull of *Rhytina* from Behring Island, were acquired by purchase.

Additional bones of Wealden Dinosaurs from Sussex were purchased through Mr. Charles Dawson. Remains of *Ophthalmosaurus*, *Metriorhynchus*, and *Steneosaurus*, from the Oxford Clay of Peterborough, were presented by Mr. Alfred N. Leeds. A specimen of *Ichthyosaurus intermedius*, from the Lower Lias of Barrow-on-Soar, showing the integument of the paddle, was presented by Mr. Montagu Browne.

A unique group of *Cephalaspis murchisoni* from the Ledbury Passage Beds, and Cephalaspidian remains from the same formation, were presented by Mr. G. H. Piper. Large specimens of *Rhinobatus bugesiicus* and *Hypsocormus insignis*, from the Bavarian Lithographic Stone, were purchased from Mr. B. Stürtz. Fish-teeth from the Upper Cretaceous and Eocene of Belgium were presented by Mr. Houzeau de Lehaie. Three specimens of *Priscacara*, from the Green River Shales, Wyoming, were presented by Mr. T. A. Rickard. Portions of the Rhaetic bone-bed from Aust, with fish-remains, were presented by Mr. Spencer G. Perceval.

Palæozoic and Tertiary fossils from Australia and Tasmania

were presented by Mr. (now Sir) C. Purdon Clarke. Some Silurian fossils from the collection of the late Mr. John Gray, of Hagley, were purchased from Mr. F. H. Butler. Tremadoc fossils from Shineton, Shropshire, were purchased from Mr. Henry Keeping. Cephalopoda from the Muschelkalk near Hallstatt were purchased through Dr. E. von Mojsisovics. Paris Eocene Mollusca were presented by Mr. E. de Boury, and Barton Clay Mollusca by Mr. R. Etheridge. Pliocene Mollusca from Florida were presented by Mr. Joseph Willcox. Marine Mollusca from British Glacial deposits were presented by Mr. R. D. Darbishire. Non-marine Mollusca from the Barnwell Gravels, Cambridge, were presented by Rev. E. S. Dewick. *Scolithus* and *Arenicolites* from the Cambrian of Durness were presented by the Duke of Argyll. Fossil corals from Barbados were presented by Colonel H. W. Feilden. Microscope-sections of Foraminiferal and other skeletons, illustrating some of his own papers, were presented by Mr. H. J. Carter. Nummulites from Mentone were presented by Mr. E. B. Luxmoore.

Total number of acquisitions, 10,192.

1890.

The most important acquisitions this year were a first instalment of a collection of Oxfordian Reptilia, purchased from Messrs. Alfred N. and Charles E. Leeds, and a first instalment of a collection of Wealden Plants purchased from Mr. P. J. Rufford. The second instalment of Dr. Forsyth Major's collection of Lower Pliocene Mammalia from Samos was also purchased. The late Mr. Robert Damon's collection illustrating his "Geology of Weymouth and the Isle of Portland," and additional British fossils from the Gavey and Thomas Wright Collections, were acquired by purchase. Miscellaneous British fossils were presented by Mrs. Leifchild. The Goldenberg Collection, chiefly from the Lower Permian of Rhenish Prussia, was purchased from Prof. Schenk of Leipzig. The McCormick Collection of fossils from the Arctic Regions, Madeira, Kerguelen Land, the Falkland Islands, and Tasmania, was received as a bequest. Miscellaneous Tertiary and Post-Tertiary fossils from Barbados were presented by Mr. A. J. Jukes-Browne.

Mammalian remains from a Turbary at Walthamstow were presented by Mr. J. E. Greenhill. A few bones and teeth of *Rhinoceros* and other remains from surface deposits, Sarawak,

Borneo, were presented by Mr. A. H. Everett. A skull of *Oreodon culbertsoni*, from the White River Formation of Dakota, was presented by Prof. Joseph Leidy.

Specimens of *Palæaspis americana*, from the Upper Silurian of Pennsylvania, were presented by Prof. E. W. Claypole.

A second collection of Cephalopoda and other Mollusca, from the Trias of Hallstatt, was purchased through Dr. E. von Mojsisovics. Jurassic Cephalopoda from Dorsetshire were purchased from Mr. S. S. Buckman. Cretaceous and Tertiary Mollusca from Montana were presented by Mr. E. S. Cameron. Mollusca and other fossils from the London Clay of Fareham were presented by Mr. J. W. Elwes. Miocene Mollusca and other fossils from Malta were presented by Dr. (now Sir) John Murray. Pleistocene non-marine Mollusca from various localities in the Thames Valley were presented by Mr. F. C. J. Spurrell and Mr. B. B. Woodward; from Staines, by Mr. J. Allen Brown; from Moorfields, by Mr. T. Warburton; from Blackfriars Road, by Mr. C. J. A. Mejer; from Fulham, by Mr. F. Chapman; and from the Lea Valley, by Mr. J. E. Greenhill. A few American Palæozoic Crinoids and Blastoids were presented by Dr. F. A. Bather; some Devonian Pentremites from Kentucky, by Mr. Hugh Kimbley. Cambro-Silurian Sponges from Canada were presented by Sir J. William Dawson. *Syringosphæra* from the Karakoram, Kashmir, was presented by Dr. William King.

Specimens of the *Glossopteris* Flora from South Africa were presented by Mr. D. Draper, Mr. G. J. Lee, and the Council of the Royal Society; from Argentina, by Dr. H. D. Hoskold.

Total number of acquisitions, 7057.

1891.

The collection of the late Mr. S. H. Beckles, purchased from his widow, formed a most important accession to the general series of British fossils. A valuable collection of Eocene and Mesozoic fossils from the south of England, was also purchased from Mr. J. B. Ogle. A collection of Chalk fossils, chiefly from Burham, Kent, was presented by Mr. S. J. Hawkins. Fossils from the Red Chalk were purchased from Mr. Thomas Jesson.

A newly discovered frontlet of *Saiga tatarica*, from the Thames deposits at Twickenham, was presented by Dr. J. R. Leeson. Remains of bison and reindeer dug up in Buckingham Palace Road, were presented by the Duke of Westminster. The

antlers of *Cervus elaphus*, from tufa at Alport, near Bakewell, Derbyshire, described by R. Barber (*Phil. Trans.*, 1785, p. 353), and subsequently by H. Woodward (*Geol. Mag.*, 1898, p. 49, pl. ii.), were presented by Mr. Frank S. Goodwin. A skull of *Titanotherium* and a skull of *Hyænodon horridus* from the White River Formation of Dakota, were acquired by purchase.

A restored skeleton of *Pachyornis robustus* from New Zealand was purchased.

Important remains of *Iguanodon* and other Wealden Dinosaurs were contained in the Beckles Collection. Another instalment of the Leeds Collection of Oxfordian Reptilia was purchased. The supposed reptilian eggs, *Oolithes bathonicæ*, from the Great Oolite, described by J. Buckman (*Quart. Journ. Geol. Soc.*, vol. xvi.), were presented by the Earl of Ducie.

Unique Chalk fishes were contained in the Beckles and Hawkins Collections. A fine slab of *Portheus*, two specimens of *Empo*, and one of *Ichthyodectes*, from the Chalk of Kansas, were acquired by purchase. The Weston Collection of fishes from the North Staffordshire coalfield was purchased. A few Devonian fish-remains from Spitzbergen were presented by Dr. A. S. Woodward.

Some Palæozoic fossils from the Falkland Islands were presented by Dr. H. H. Hoffert. A series of Mesozoic and Palæozoic Entomostraca was purchased from Prof. T. Rupert Jones. Two Tertiary Brachyurous Crustacea from Akita, N. Japan, were presented by Mr. B. Clarke Thornhill. Fossil insects from the Tertiary of Wyoming and Colorado were presented by Mr. R. C. Hills. Jurassic Ammonites from Somaliland were presented by Mr. J. G. Nicholson. Miocene Mollusca from Java were presented by Mr. Julien Debey. Pleistocene non-marine Mollusca from Brentford and Kew (Belt Coll.), were presented by Mrs. Belt; from Chelmsford and Portland, by Mr. B. B. Woodward; from Whitehall, by Mr. W. J. Lewis Abbott. Pleistocene Mollusca from N. Italy and S. France, were presented by Mr. Clement Reid. An important collection of Devonian Echinoderma, especially Asteroidea and Ophiuroidea, from Bundenbach, Rhenish Prussia, was purchased from Mr. B. Stürtz, who had described many of the specimens. A collection of Palæozoic Crinoidea, including type- and figured specimens, was purchased from Mr. J. G. Grenfell. Cretaceous Echinoids from Algeria were purchased from Mr. B. Stürtz. Some Brachiopoda from the Inferior Oolite of Dorsetshire, were

presented by Mr. J. F. Walker. A collection of slides of Polyzoa and other minute organisms was purchased from Mr. G. R. Vine. Fossil corals from Barbados were presented by Mr. G. Firth Franks; from Antigua, by Mrs. E. Turner.

Eocene plants from Florissant, Colorado, were presented by Mr. R. C. Hills. A few Wealden plants from Hastings were purchased from Mr. P. J. Rufford.

Total number of acquisitions, 15,211.

1892.

The Widger Collection of remains of Pleistocene Mammals and Birds from the Tor Bryan Caves, Torquay, was purchased from Mr. F. H. Butler. A similar collection from the Heathery Burn Cave, Durham, was presented by Rev. Canon Greenwell. A piece of skin of the Mammoth from Siberia was obtained by exchange with the Imperial Academy of Sciences, St. Petersburg.

A plaster cast of the hind limb (without the phalanges) of *Brontornis burmeisteri*, from Lake Argentino, Patagonia, was presented by Dr. F. P. Moreno. Bones of Dodo from Mauritius were presented by Sir Charles Cameron Lees.

Among Reptilia the most important acquisitions were the type-skeleton of *Pariasaurus baini*, an incomplete skeleton of *Pariasaurus bombidens*, and other remains obtained by Prof. H. G. Seeley from the Karoo Formation of South Africa, presented by the Council of the Royal Society. A unique skull with shoulder-girdle of *Procolophon trigoniceps*, from the same formation, was presented by Dr. Hugh Exton. Remains of *Iguanodon*, from the Wealden of Sussex, were again purchased through Mr. Charles Dawson. Another instalment of the Leeds Collection of Oxfordian Reptilia was purchased. Two complete shells and other remains of *Testudo grandidieri*, from caverns in Madagascar, were purchased from Mr. H. Grose-Smith.

The portion of the Leeds Collection purchased this year included many important fish-remains from the Oxford Clay of Peterborough. Two Jurassic fishes (*Lycoptera sinensis*) from Shantung, China, were presented by Mr. H. M. Becher. The John Plant Collection of fish-remains from the Coal Measures, near Manchester, was purchased. Important fishes from the Devonian of Canada, and fragments of *Pteraspis cornubica* from the Devonian of Cornwall, all collected by Mr. Jex, were purchased from Mr. R. F. Damon. Selachian teeth from the

Tertiary of Bissex Hill, Barbados, were presented by Col. H. W. Feilden.

Miscellaneous Invertebrata, collected by the late Mr. W. F. Jennings of Highworth, from the Mesozoic rocks of Britain, were presented by Miss Ethel A. Thomas. Collections of Invertebrata from the Inferior Oolite of Yeovil and from the Oxford Clay of St. Ives, were purchased from Mr. Henry Monk and Mr. T. Jesson respectively. The type-specimen of *Palæotermes ellisi*, from the Lower Lias of Barrow-on-Soar, was presented by Mr. Montagu Browne. Upper Silurian Ostracoda were purchased from Prof. T. Rupert Jones. British and French Eocene Mollusca were purchased from Mr. J. S. Gardner. A slab of shell-marble from La Luz, New Mexico, was presented by Mr. O. H. Howarth. Pleistocene non-marine Mollusca from Bohemia were purchased from Dr. Anton Fritsch. Pleistocene Mollusca from Barbados were presented by Right Rev. Bishop Mitchinson; from Malta, by Mr. J. H. Cooke. Pleistocene non-marine Mollusca from Grays and the Kennet Valley (J. Pickering Collection), were presented by the Council of the Geologists' Association. Miocene Echinoids from Malta were presented by Mr. J. H. Cooke. A unique specimen of *Amplexus* from the Carboniferous Limestone of Weston was purchased from Rev. H. G. Tomkins. A collection of slides of Foraminifera and other minute organisms, made by the late Prof. W. K. Parker, was purchased from Prof. W. N. Parker. The collection of the late Dr. W. B. Carpenter, illustrating his researches on *Eozoon canadense*, was presented by Rev. J. Estlin Carpenter. Foraminifera from the Upper Chalk of Taplow were purchased from Mr. F. Chapman; from the Tertiary of Trinidad, from Mr. R. J. Lechmere Guppy. Specimens of Radiolarian marl from Barbados were presented by Mr. A. J. Jukes-Browne.

Remains of *Glossopteris* and associated plants, collected by Mr. Edgar Hall in New South Wales, were presented by Mr. W. H. Shrubsole. Another instalment of the Rufford Collection of Wealden plants was purchased.

Total number of acquisitions, 11,781.

1893.

The most remarkable acquisitions this year were remains of extinct lemurs, *Hippopotamus*, *Aepyornis*, crocodiles, etc., from the superficial deposits of Madagascar, purchased from Mr.

C. F. Wills and Mr. Joseph H. Fenn, and through Mr. Edward Gerrard. Among these fossils was the type-skull of *Megaladapis madagascariensis*, described by Dr. Forsyth Major.

Middle Miocene Mammalia from La Grive-St.-Alban (Isère), France, were purchased from Dr. Forsyth Major. Mammalian remains (with a few Mollusca), collected by Mr. J. H. Cooke in the Har Dalam caverns, Malta, were presented by the Council of the Royal Society. An important series of Pleistocene Mammalia from Crayford and Erith, Thames Valley, was presented by Mr. F. C. J. Spurrell. A mammalian tooth from the Wealden of Hastings was presented by Sir John Evans.

A skeleton of *Aptornis defossor*, found by Mr. W. S. Mitchell at Castle Rock, South Island, New Zealand, was purchased from Mr. A. Hamilton. Remains of Dinornithidæ, including scapulo-coracoids, from New Zealand, were purchased from Dr. H. O. Forbes. Remains of *Aphanapteryx*, from the Chatham Islands, were purchased from Mr. E. Gerrard. Pleistocene bird-bones from Corsica and Sardinia, described by Mr. R. Lydekker (*Proc. Zool. Soc.*, 1891), were purchased from Dr. Forsyth Major.

The type-jaws of *Pariasaurus russowii*, from the Karoo Formation of South Africa, obtained and described by Prof. H. G. Seeley, were presented by the Council of the Royal Society. The type-skull of *Steneosaurus baroni*, R. B. Newton, from the Jurassic of N. W. Madagascar, was presented by Rev. R. Baron. Plaster casts of the type-specimens of Triassic Reptilia from Elgin, described by Mr. E. T. Newton (*Phil. Trans.*, 1893), were purchased. More Oxfordian Reptilia from the Leeds Collection were purchased. Wealden Reptiles, Fishes, and Plants were purchased from Mr. P. J. Rufford.

A collection of Lower Devonian Fishes, with a few Crustacean and Plant-remains, from Forfarshire, was purchased from Rev. Hugh Mitchell. Some Lower Carboniferous Elasmobranch teeth from Mjatschkowa, Moscow, were also purchased. The largest known dentition of *Myliobatis (M. pentoni)*, from the Eocene near Cairo, was presented by Surg.-Capt. R. H. Penton.

A large series of Silurian fossils from Gotland was collected and presented by Dr. F. A. Bather. Remains of *Olenellus* from the Lower Cambrian, Caer Caradoc, were purchased from Mr. R. F. Damon. Gault Ostracoda and Foraminifera were purchased from Mr. F. Chapman. Some Cephalopoda from the Carboniferous Limestone of Ireland were presented by Dr. A. H. Foord. Inferior Oolite Nautili were purchased from Mr. S. S. Buckman.

Eocene Mollusca from the Paris Basin, formerly in the collection of Miss Etheldred Benett, were presented by Mr. J. Benett-Stanford. Miocene Mollusca from N. Carolina were presented by Mr. Joseph Willcox. Additional Lower Devonian Asteroids from Bundenbach were purchased from Mr. B. Stürtz. Crinoids from the Trenton Limestone were purchased from Dr. H. M. Ami. Specimens of Palæozoic Crinoidal limestone from N.W. of Cabul, Afghanistan, were presented by Mr. A. L. Collins. The G. R. Vine Collection of Polyzoa and the W. Gamble Collection of Cretaceous Polyzoa, were purchased. Specimens of *Salterella* from the Lower Cambrian of Sutherland, were presented by the Duke of Argyll.

Two cores of Carboniferous sandstone and Carboniferous plant-remains from the Dover boring were presented by Mr. Francis Brady. Plants from the Forest of Dean Coalfield were purchased from Mr. T. Stock. Remains of the *Glossopteris* Flora from South Africa were presented by Mr. David Draper. Two specimens of *Arthrophyeus*, obtained by Mr. G. E. Ferguson, probably from a Palæozoic formation in the interior of Gold Coast Colony, were presented by Prof. J. W. Judd.

Total number of acquisitions, 11,948.

1894.

Two important general collections were acquired this year by purchase, namely: (1) that of Prof. (afterwards Sir) Joseph Prestwich from the Coal Measures of Coalbrookdale, and (2) that of Mr. T. Jesson from the Cambridge Greensand. Two extensive collections from the Cretaceous of Bahia, Brazil, were presented by Mr. Samuel Allport and Mr. Joseph Mawson respectively; the former had been described in the *Quarterly Journal* of the Geological Society, 1859; the latter contained the first evidence of Pterodactyls from South America.

Lower Pliocene Mammalia from Samos, including a skull of *Orycteropus*, were purchased from Mr. B. Stürtz. A mandibular ramus of *Mastodon humboldti* from Brazil was included in Mr. Mawson's donation already mentioned. Miscellaneous bones of Mammalia and *Aepyornis* from Madagascar, were purchased from Messrs. J. H. Fox & Co., E. Gerrard, and J. T. Last. An antler of Reindeer and a skull of Bison from Thames deposits at Twickenham, were presented by Dr. J. R. Leeson and Mr. G. B. Laffan.

Middle Miocene bird-remains from La Grive-St.-Alban, were purchased from Dr. Forsyth Major. A sacrum, humerus, and radius of *Harpagornis moorei* from Oamaru, New Zealand, were presented by Dr. H. O. Forbes.

Remains of large Dinosauria from the Jurassic of South West Madagascar, described by Mr. R. Lydekker (*Quart. Journ. Geol. Soc.*, vol. li., 1895), were purchased from Mr. E. Gerrard. Dinosaurian bones from the Wealden of Sussex were purchased through Mr. Charles Dawson. Skulls and other remains of Pliosauria from the Oxford Clay of Peterborough were purchased from Mr. Alfred N. Leeds. A small Cretaceous Dolichosaurian from the Island of Lesina, Dalmatia, was purchased from Mr. B. Stürtz.

Fish-remains from the Upper Silurian of Oesel, Baltic Sea, collected by Mr. A. Simonson, were purchased from him and from Dr. F. Krantz. Specimens of *Palæospondylus gunni*, obtained by Mr. Donald Calder from the Old Red Sandstone of Caithness, also plates of *Homosteus milleri* from the same formation, were purchased from Mr. F. H. Butler. Plates of *Asterolepis maxima* from the Upper Old Red Sandstone of Nairn, were presented by Dr. R. H. Traquair. The John Ward Collection of Fishes and Amphibia from the Coal Measures of Staffordshire, was acquired by purchase.

Silurian and Devonian Invertebrata from Hérault, France, were purchased. Part of the Madeley Collection of Silurian Invertebrata from Dudley, was obtained by exchange. Jurassic Invertebrata from Gloucestershire and Dorsetshire were purchased from Mr. S. S. Buckman. Some Tertiary limestones from Borneo were presented by Mr. A. H. Everett. A specimen of *Triarthrus becki*, showing appendages, from the Utica Slate, New York, was presented by Prof. O. C. Marsh. Tertiary Mollusca from Alabama were purchased from Mr. G. B. Sowerby; Pliocene Mollusca from Monte Mario, near Rome, from Mr. A. Martinetti; and English Crag Mollusca (collected by the late Mr. Robert Bell), from Mr. R. F. Damon. Cretaceous Mollusca from the Umtamvana River, Natal, were presented by the Government of Natal; Oligocene and Miocene Mollusca from Bordeaux were presented by Messrs. G. F. Harris and H. W. Burrows; and Miocene Mollusca and Corals from Antigua, were presented by Mr. A. J. Jukes-Browne. Crinoids from the Carboniferous Limestone of Alveston, Bristol, were purchased from Mr. T. Stock. Tertiary Polyzoa from New Zealand, labelled

and partly described by Mr. A. W. Waters, were purchased from Mrs. H. Tabor. Some Calci-sponges from the English Inferior Oolite, described by Dr. Hinde in his "Monograph of British Fossil Sponges" (Paleontographical Society), were presented by Mr. R. F. Tomes. Nummulitic limestone from Mürren, Bernese Oberland, was presented by Sir John Lubbock, Bart. (now Lord Avebury) and Mr. R. Etheridge. Gault Foraminifera were purchased from Mr. F. Chapman.

A large collection of fossil plants from the Coal Measures of Radstock, Somersetshire, was presented by Mr. James McMurtrie. An additional instalment of the Rufford Collection of Wealden plants was purchased.

Total number of acquisitions, 16,305.

1895.

Several important private collections were acquired this year. A large selection of English fossils (except insects) from the collection of Rev. P. B. Brodie, was purchased. English Jurassic and Cretaceous fossils, collected by Mr. W. C. Lucy, were presented by Mr. Edward Power. The collection of the late Mr. J. W. Hulke, chiefly Dinosaurian bones from the Wealden of the Isle of Wight, was presented by Mrs. Hulke. The collection of the late Mr. James W. Davis, chiefly fossil fishes, was purchased from Mrs. Davis. Prof. H. A. Nicholson's collection of Stromatoporoids was purchased. Another instalment of the Madeley Collection of Upper Silurian and Carboniferous fossils was purchased from Mr. R. F. Damon. A collection of flints and Mammalian bones, illustrating the Palæolithic floor at Crayford described in *Quart. Journ. Geol. Soc.*, vol. xxxvi. (1880), was presented by Mr. F. C. J. Spurrell.

A plaster cast of the calvaria of *Pithecanthropus erectus* from Java was presented by Dr. E. Dubois. A skull and horn of *Rhinoceros antiquitatis* from Siberia were purchased from Mr. R. F. Damon. A skull of *Titanotherium* from the White River Formation of Dakota was purchased from Prof. H. A. Ward. Lower Pliocene Mammalia collected by Dr. Forsyth Major at Olivola, North Italy, were purchased through Mr. F. H. Butler. Remains of *Hippopotamus* and *Aepyornis* from Madagascar, collected by Rev. James Wills, were also purchased.

Another important donation of fossil Reptilia (*Cynognathus*, *Gomphognathus*, &c.), collected by Prof. H. G. Seeley in the Karoo Formation of South Africa, was received from the Council

of the Royal Society. A few Oxfordian Reptilia were purchased from Mr. Alfred N. Leeds. Dinosaurian teeth from the Portlandian of Aylesbury were presented by Mr. J. Alstone. A plaster cast of a skeleton of *Iguanodon bernissartensis* was obtained by exchange with the Brussels Royal Museum of Natural History.

A fragment of *Belonostomus sweeti*, from the Cretaceous of Queensland, was presented by Mr. George Sweet.

Invertebrata and plants from the Jurassic and other formations of Madagascar, partly described by R. B. Newton (*Quart. Journ. Geol. Soc.*, vol. li., 1895), were presented by Rev. R. Baron. Jurassic Invertebrata from Normandy were purchased from Mrs. J. F. Blake. Invertebrate fossils and Radiolarian Chert from the Lower Culm Measures of North Cornwall, described by Howard Fox and G. J. Hinde (*Quart. Journ. Geol. Soc.*, vol. li., 1895), were presented by those gentlemen. A fine Scorpion (*Cyclophthalmus*) from the Lower Permian of Bohemia, was purchased from Prof. J. Kusta. Specimens of *Triarthrus becki*, showing appendages, from the Utica Slate, New York, were presented by Prof. O. C. Marsh. A slab of *Uintaerinus* from the Chalk of Kansas, described and figured (*Proc. Zool. Soc.* for 1895), was purchased from Mr. H. T. Martin. Eighty-eight Echinoderms of the Madeley collection were purchased. Specimens of *Archanodon jukesi*, from the Upper Old Red Sandstone of Llanvaches, Monmouthshire, were presented by Mr. Percy Hawkins. Non-marine Mollusca from the Thames deposits at Twickenham were presented by Dr. J. R. Leeson. Specimens of *Brachiospongia* from the Ordovician of Kentucky were presented by Prof. O. C. Marsh. Sponges from the Coral Rag and Chalk of Yorkshire were purchased from Mr. S. Chadwick.

A unique specimen of *Cycadeoidea gigantea*, from the Purbeck Beds of Portland, described by A. C. Seward (*Quart. Journ. Geol. Soc.*, vol. liii., 1897), was purchased from Mr. R. F. Damon. Fossil plants from Inferior Oolite, Scarborough, were also purchased.

The collection of deep-sea deposits made by H.M.S. *Challenger* was received from Dr. (now Sir) John Murray.

Total number of acquisitions, 9366.

1896.

The most important acquisition this year was the late Prof. W. C. Williamson's Collection of Carboniferous Plants, especially

microscope-sections, purchased from his executors. A unique collection of remains of fossil birds from the Santa Cruz formation of Patagonia, described by C. W. Andrews (*Trans. Zool. Soc.*, vol. xv., 1899), was purchased from Dr. Florentino Ameghino. The residue of the late Sir Joseph Prestwich's Collection, including flint implements, was presented by Lady Prestwich. A large selection from the Collection of the late Mr. W. Pengelly was presented by Mrs. Pengelly. A selection from the late Mr. T. J. Slatter's Collection of Jurassic fossils, with a few Mammalian remains from Evesham, was purchased from Miss P. Slatter.

A valuable collection of Mammalian remains, with a few lower organisms, from the White River Formation of Dakota, U.S.A., was purchased through Prof. W. B. Scott. Bone-breccia, with remains of *Burramys*, *Perameles*, &c., from the Wombeyan Caves, New South Wales, was presented by Dr. R. Broom. A skull of *Bos primigenius* from Twickenham was presented by Dr. J. R. Leeson.

A nearly complete skeleton of one individual of *Dinornis maximus* from New Zealand was purchased from Mr. C. A. Ewen.

A few additional Reptilia from the Oxford Clay of Peterborough were purchased from Mr. Alfred N. Leeds. Remains of Microsauria from the Coal Measures, South Joggins, Nova Scotia, were presented by Sir J. William Dawson. Some remains of Reptiles and Fishes from the Cretaceous near Bahia, Brazil, were presented by Mr. Joseph Mawson.

Specimens of *Palæospondylus* and other Fishes from the Old Red Sandstone of Caithness, were presented by Mr. James Reid. An important small collection of fish-remains from the Upper Old Red Sandstone of Scaat Craig, Elgin, was purchased from Major Lambart Brickenden. Three specimens of *Cladoselache* from the Upper Devonian of Ohio (William Clark Collection), were purchased from Prof. E. W. Claypole.

Miscellaneous fossils from the Rhætic, Aust Cliff, were purchased from Mr. F. Ellis. Invertebrata from the Lower Lias of Somersetshire were presented by Mr. Spencer G. Perceval; from the Gault of Okeford Fitzpaine, Dorset, by Miss Lowndes. Fossils from the Salt Range, India, were presented by Mr. F. G. Brook Fox; from Somaliland, by Mrs. E. Lort Phillips. Lower Carboniferous Invertebrata from Mjatschkowa, Moscow, were purchased from Mr. R. F. Damon; Miocene Invertebrata from

Malta, from Mr. J. H. Cooke; Cretaceous Invertebrata from the Lebanon, from Rev. C. H. V. Gollmer. Trilobites from the Culm Measures near Barnstaple were presented by Mr. J. G. Hamling; from the Silurian of Mount Stephen, British Columbia, by Mr. George de Wolf. Lower Pliocene Mollusca from North Italy, noticed by Gwyn Jeffreys (*Quart. Journ. Geol. Soc.*, vol. xl., 1884), were presented by Colonel Godwin-Austen. Pleistocene Mollusca from the Rubble Drift of Portland and Sangatte (France), were presented by Rev. R. Ashington Bullen. Non-marine Mollusca from deposits near London, were presented by Dr. Frank Corner. Tertiary Mollusca from Australia and Tasmania were purchased from Mr. R. F. Damon. Jurassic and Cretaceous Echinoids from France were purchased from Mr. A. Michalet. The late Mr. G. W. Shrubsole's Collection of Palæozoic Polyzoa was presented by Mr. George Shrubsole.

Plant-remains from the Miocene lignites of the Siebengebirge, near Bonn, were purchased from Mr. B. Stürtz.

Total number of acquisitions, 16,262.

1897.

Mr. A. C. Savin's Collection of Vertebrata, chiefly Mammalia, from the Forest Bed Series of Norfolk, was acquired by purchase. A second instalment of Dr. Forsyth Major's Collection of Lower Pliocene Mammalia from Olivola was also purchased. Remains of pigmy elephants obtained by Dr. Hans Pohlig from the caverns of Sicily, were purchased from Dr. F. Krantz. Some jaws of Rodentia from the Fish River Caves, Blue Mountains, New South Wales, were presented by Mr. H. Spearing. Limb-bones of *Genyornis newtoni* from Mulligan Springs, South Australia, were received in exchange from Prof. E. C. Stirling.

Important remains of Reptilia from the Oxford Clay of Peterborough, were purchased from Mr. Alfred N. Leeds. Jaws of *Euskelesaurus* and other remains from the Karoo Formation of South Africa (described in *Ann. & Mag. Nat. Hist.*, ser. 6, vol. xiv., 1894), were presented by Prof. H. G. Seeley. A specimen of *Rhamphorhynchus gemmingi*, showing the palate, from the Lithographic Stone of Eichstädt, was purchased from Dr. F. Krantz.

Specimens of *Atherstonia* and other Palæoniscid fishes from the Karoo Formation of South Africa, were presented by Prof. H. G. Seeley, Mr. T. J. Haughton, and Mr. S. Kemper.

Fossils from the neighbourhood of Nagpur, Central India, were bequeathed by the late Rev. Dr. John Hunter; from British Honduras, were presented by the Administrator of the Colony; from the Jurassic, Cretaceous, and Tertiary of Algeria, were purchased from Mr. R. F. Damon. Lower Carboniferous Invertebrata from the Pennine Hills and the Isle of Man were presented by Messrs. J. Barnes and W. F. Holroyd; Lower Jurassic Invertebrata from Somersetshire and Dorsetshire were purchased from Mr. Henry Monk. Some Bohemian Trilobites from the Barrande Collection were purchased from Dr. Anton Fritsch. Tertiary and Cretaceous Mollusca from Galveston, Texas, were purchased from Mr. J. A. Singley. The Worthen Collection of American Palæozoic Echinoderms, chiefly Blastoidea and Crinoidea, was purchased. Polyzoa from the Irish Chalk were presented by Mr. Joseph Wright; other Cretaceous Polyzoa were presented by Dr. H. P. Blackmore, Mr. C. J. A. Meÿer, and Mr. H. A. Hinton. A specimen of Nummulitic Limestone from Singhe Lâ, Himalaya, was presented by Mr. T. D. La Touche.

Remains of the *Glossopteris* Flora from South Africa, described by A. C. Seward (*Quart. Journ. Geol. Soc.*, vol. liii., 1897), were presented by Mr. David Draper.

Total number of acquisitions, 7562.

1898.

The most important collection acquired this year was that of Fossil Insects made by the late Rev. P. B. Brodie, purchased from his executor. The collection of the late Mr. G. H. Piper, consisting chiefly of fossils from the Upper Silurian and Passage Beds at Ledbury, was also purchased from his executor. A nearly similar but comparatively small collection made by the late Rev. T. T. Lewis, of Aymestry, was purchased from Mr. T. Bryan Ward. The Castelli Collection, chiefly Tertiary fossils from N. Italy, was purchased from Mr. R. F. Damon.

Part of a skull of *Balæna australis* from a river deposit at Villa Constitucion, on the Parana, Argentine Republic, was presented by Mr. A. C. Gostling. Jaws of cave-bear from a cavern at Isturitz, Bayonne, were presented by Mr. George Greenwood. A tooth of *Elasmotherium* from Saratov, Russia, was presented by Mr. Karl Masing.

The skull and other remains of a bird (*Prophathon shrubsolei*, Andrews, *Proc. Zool. Soc.*, 1899), from the London Clay of

Sheppey, were purchased from Mr. W. H. Shrubsole. A plaster cast of the type-specimen of *Archæopteryx siemensii*, in the Berlin Museum, was purchased from Dr. F. Krantz. Bones of birds from the Chatham Islands were purchased through Mr. J. D. Enys.

A fine skeleton of *Ichthyosaurus platyodon*, from the Lower Lias of Stockton, Warwickshire, was presented by Mr. Michael Lakin. Wealden Dinosaurian bones from Sussex were purchased through Mr. Charles Dawson. A Reptilian egg from the Oxford Clay, Peterborough, was presented by Mr. Alfred N. Leeds.

A large specimen of *Squatina alifera* and other fish-remains from the Lithographic Stone of Nusplingen, Würtemberg, were purchased from Mr. B. Stürtz. Three Characinoid fishes from a Tertiary Lignite at Taubaté, San Paulo, Brazil, were obtained by exchange with the San Paulo Museum. Valuable Cephalaspidians were contained in the Piper Collection.

Palæozoic Invertebrata from Tasmania were presented by Mr. T. Stephens; from Russia by Dr. F. A. Bather. A few Upper Carboniferous Invertebrata from Shansi, China, were presented by Mr. W. H. Shockley. Remarkable preparations of *Eurypterus* from the Upper Silurian, Island of Oesel, were purchased from Dr. G. Holm. Mollusca from the Carboniferous Limestone of Yorkshire were presented by Rev. Addison Crofton. American Palæozoic Polyzoa were purchased from Mr. E. O. Ulrich; English Cretaceous Polyzoa from Mr. W. Gamble; and French Cretaceous Polyzoa from Mr. F. H. Butler. Specimens of Radiolarian Chert from Japan were presented by Dr. T. Kochibé.

Another instalment of the Rufford Collection of Wealden plants was purchased. Remains of the *Glossopteris* flora from the Transvaal were presented by Dr. F. H. Hatch; from Tasmania by Mr. T. Stephens.

Total number of acquisitions, 13,012.

1899.

A large collection of fossils, including Mammalia, obtained by Mr. Jex from Patagonia, was purchased from Mr. R. F. Damon. An extensive series of Tertiary fossils from Anguilla, Dominica, Antigua, and Barbuda, in the West Indies, was collected and presented by Dr. J. W. Gregory. The latter included remains of the Rodent *Amblyrhiza* in cave-breccia from Anguilla.

Remains of the large *Megaladapis insignis* from Madagascar were purchased from Mr. R. F. Damon. A skull of *Castoroides ohioensis* from the Pleistocene of Illinois was obtained by exchange with the U.S. National Museum.

Part of the skeleton of a gigantic Dinosaur, *Cetiosaurus leedsi*, from the Oxford Clay of Peterborough, was purchased from Mr. Alfred N. Leeds.

A small series of Teleostean Fishes from the Chalk of Bohemia was purchased from Dr. Anton Fritsch. *Thelodus* and *Birkenia* from the Upper Silurian of Lanarkshire were purchased from Mr. F. H. Butler. Specimens of *Pteraspis* from Antigonish Co., Nova Scotia, were presented by the Director of the Geological Survey of Canada.

Silurian Invertebrata from Ontario, Canada, were presented by Col. C. C. Grant. Devonian Invertebrata from the Eifel were presented by Mr. Upfield Green. Some fragmentary duplicates from a collection of Jurassic fossils from Franz Josef Land were presented by Messrs. F. Jackson and A. Harmsworth. English Chalk Invertebrata were presented by Dr. Rowe, Mr. C. D. Sherborn, Mr. George Potter, and Mr. W. McPherson. The Dowker Collection of Cretaceous and Tertiary fossils from Kent was purchased from Miss E. F. Dowker. Miscellaneous Entomostraca were purchased from Prof. T. Rupert Jones. Mollusca and Corals from the Great Oolite of Fairford, Gloucestershire, were purchased from Miss A. T. Slatter. Tertiary Mollusca from Victoria, Australia, were purchased from Mr. F. H. Butler; from Florida, from Messrs. Sowerby and Fulton. Specimens of Silurian Crinoidal Limestone from Szechuen, China, were presented by Mr. F. W. Styan. A second instalment of the E. O. Ulrich Collection of American Palæozoic Polyzoa was purchased. Some Polyzoa and other fossils from the Chalk of Rügen were purchased from Mrs. Agnes Laur. The late Dr. George Busk's Collection of Tertiary and Mesozoic Polyzoa, including type-specimens described in his Monograph of the Polyzoa of the Crag, was presented by the Misses Busk.

Total number of acquisitions, 9780.

1900.

The important collection of British fossils, chiefly of Palæozoic age, formed by the late Mr. G. H. Morton, of Liverpool, was purchased from Miss Morton. An almost unique collection of

Palæozoic fishes from the Upper Devonian of Ohio, comprising Dinichthyids and Elasmobranchs, was purchased from Dr. William Clark, of Berea.

An extensive series of Mammalian remains, chiefly of Lemurs, from the caverns of Madagascar, was purchased from Mr. F. Sikora. A reconstructed skeleton of *Hippopotamus madagascariensis*, from superficial deposits in Madagascar, was purchased from Dr. Forsyth Major. A few bones of Lower Pliocene Mammalia from Maragha, Persia, were presented by Mr. R. T. Günther. Mammalian remains from the Phosphorites of southern France were purchased from Mr. B. Stürtz; from the Tertiaries of Patagonia, from Mr. R. F. Damon. A tusk of *Trichechodon* and other Mammalian fossils from the Red Crag of Suffolk were presented by the Committee of the Ipswich Museum.

A pelvis, vertebræ, and limb-bones of *Hesperornis*, from the Chalk of Kansas, were purchased from Mr. Handel T. Martin.

The nearly complete wing-bones of a gigantic Pterodactyl, *Pteranodon*, from the Kansas Chalk, were also purchased from Mr. Martin. Important remains of Mosasauria (*Platecarpus*, *Clidastes*, and *Tylosaurus*) and Fishes (*Anognmius*, etc.) from the same formation, were purchased from Mr. C. H. Sternberg.

Freshwater Tertiary Fishes from the Lignite of Taubaté, San Paulo, Brazil, were presented by Mr. John Gordon. Additional Fish-remains from the Upper Silurian of Lanarkshire were purchased from Mr. F. H. Butler.

Miscellaneous British Fossil Invertebrata were purchased from Mr. T. D. Palin. Some Ordovician and Silurian fossils from Ontario, Canada, were presented by Col. C. C. Grant, and others were purchased from Dr. H. M. Ami. Two pieces of fossiliferous Carboniferous Limestone from Siam were presented by Mr. W. Mahon Daly. Marine Triassic Lamellibranchs from the Malay Peninsula, described by R. B. Newton (*Proc. Malac. Soc. London*, vol. iv.), were presented by Mr. H. F. Bellamy. Fossils from the English Chalk were presented by Mr. W. McPherson; from the Red Chalk of Hunstanton, collected by Mr. Westmoreland, were purchased through Mr. Spencer G. Perceval; from the French Chalk, were purchased from Mr. Clemenceau. Miocene and other fossils from Lake Urmi, N.W. Persia, described by R. B. Newton and J. W. Gregory (*Journ. Linn. Soc., Zool.*, vol. xxvii., 1899), were presented by Mr. R. T. Günther. Cretaceous Mollusca from Somaliland were presented

by Mr. J. B. Parkinson; Eocene Mollusca from Oman, Arabia, by Lieut.-Col. A. S. G. Jayakar. Tertiary Mollusca from Japan were purchased from Messrs. Sowerby and Fulton. British Jurassic Nautili were purchased from Mr. S. S. Buckman. Two specimens of *Ctenostreon*, from the Jurassic near Basle, Switzerland, were presented by Prof. R. Burckhardt. Newly-described Asteroidea and Ophiuroidea from the Lower Devonian of Bundenbach were purchased from Mr. B. Stürtz; *Eocystis primævus*, from the Lower Cambrian of New Brunswick, was presented by Dr. G. F. Matthew. Specimens of *Pteroconus mirus*, from the Lower Devonian of Bedruthan, N. Cornwall, were presented by Mr. Howard Fox; supposed Coelentera from the Lower Cambrian, Mt. Granville, New York, were presented by the Hon. C. D. Walcott.

Remains of *Naiadites* from the Rhætic of Bristol were presented by Mr. W. H. Wickes.

Total number of acquisitions, 11,226.

3. ALPHABETICAL LIST OF THE MORE IMPORTANT CONTRIBUTORS TO THE COLLECTION OF FOSSILS IN THE DEPARTMENT OF GEOLOGY.

Abbott (W. J. LEWIS)

Collected and presented non-marine Mollusca from Thames deposits at Whitehall, 1901.

Adams (ANDREW LEITH) [-1882]

Between 1848 and 1873 Leith Adams was an army surgeon, and made many observations in Natural History while on foreign service. In 1865 he visited Malta to report on an epidemic of cholera, and while there he explored some of the ossiferous fissures, from which he obtained numerous remains of pigmy elephants (*Elephas melitensis*, &c.) and a large rodent (*Leithia melitensis*). This collection was described by Leith Adams in his "Notes of a Naturalist in the Nile Valley and Malta" (1870), and was purchased by the Trustees of the British Museum in 1873.

Admiralty, Lords of the

Presented human skeleton from Guadaloupe in 1813, jaws of *Homalodontotherium* from Patagonia, 1874.

Agassiz (LOUIS)

Oligocene fishes from Canton Glarus, Switzerland, purchased 1837.

Albany Museum, S. Africa

Presented Palæoniscid fish from Karoo Formation, 1874.

Allport (SAMUEL) [1816-1897]

In early life Allport spent eight years at Bahia, Brazil, and while there he made an important small collection of fossils from the Cretaceous rocks of the neighbouring coast, which he described in 1859 (*Quart. Journ. Geol. Soc.*) and presented to the British Museum in 1894. On his return to England, Allport settled in Birmingham, where he conducted those petrological researches by which he is best known. At the same time he made and himself prepared a valuable collection from the Silurian rocks of the neighbourhood, and this was purchased in 1871 and 1873; many of the Trilobites, Molluscs, and Echinoderms were specially fine, the last yielding two co-types of *Thenarocrinus callipygus*.

Alstone (JOHN)

Presented Dinosaurian teeth from Portlandian of Aylesbury, 1895.

Ameghino (FLORENTINO)

In 1895 Dr. Ameghino, now Director of the National Museum, Buenos Ayres, described a remarkable series of bird-remains from the Santa Cruz Formation of Patagonia (*Bol. Instit. Geograf. Argent.*). This collection of 380 specimens, made by his brother Carlos Ameghino, was purchased by the British Museum from Dr. Ameghino in 1896.

Ami (HENRY M.)

Crinoids from Trenton Limestone, purchased 1893.

Ordovician and Silurian fossils from Ontario, Canada, purchased 1900.

Angelis (DE)

Pleistocene Mammalia from Buenos Aires, purchased 1845.

Ansted (DAVID THOMAS)

Presented jaw of *Rhinoceros etruscus* from Tejares, Malaga, 1868.

Archer (THOMAS CROXEN)

See ARMSTRONG, J., 1884.

Argyll (GEORGE DOUGLAS CAMPBELL, *Eighth Duke of*)

Presented *Scolithus* and *Arenicolites* from Cambrian of Durness, 1889, *Salterella* from Cambrian of Sutherland, 1893. Also sold to the Museum a Miocene Berycoid fish (*Holocentrum melitense*) from Malta, 1887.

Armstrong (JAMES) [1832-1892]

One of the founders of the Glasgow Geological Society and joint author of a "Catalogue of Western Scottish Fossils." "His private collection was one of the best illustrations of the palæontology of the Glasgow area, and is now preserved in the Museum of Science and Art, Edinburgh, while a small part is in the cabinet of Dr. Hunter of Carluke, Lanarkshire [now in Kilmarnock Museum]" (*Geol. Mag.*, 1893, p. 94). A portion, however, consisting of 282 Carboniferous fossils, was transferred to the British Museum in 1884, through Prof. T. C. Archer, Director of the Edinburgh Museum. In 1880 the Trustees bought, through the dealer, E. W. Janson, 252 specimens of Scottish Carboniferous Ostracoda collected by Armstrong.

Astier (J. E.)

Astier was a Professor at the College of Grasse (Var), and author of a "Catalogue descriptif des *Ancyloceras* appartenant à l'étage néocomien d'Escagnolles et des Basses-Alpes" (1851). In 1853 the Trustees bought from him 1323 specimens of Cephalopoda from the Jurassic and Cretaceous strata of the Basses Alpes, representing 543 species, many being specimens figured in the above-mentioned work and by A. d'Orbigny in the "Paléontologie française." They are accompanied by oblong paper labels in Astier's own hand, with a border of printed ornament.

Atherstone (*The Hon.* WILLIAM GUYBON) [1813-1898]

Resident at Grahamstown, Cape Colony, Atherstone had his attention directed by A. G. Bain (*q.v.*) to the Fossil Reptiles of the Karoo Formation. Of these he found many important specimens, and in 1872 and 1876 sent to the British Museum valuable donations, described in Owen's "Catalogue of Fossil Reptiles of South Africa" (1876). He also discovered a Palæoniscid Fish (*Atherstonia scutata*) of which he presented the type-specimen to the British Museum in 1884. As one of the founders of the Albany Museum, Grahamstown, he enriched it with part of his collection.

Attersoll (EMILIE, *Miss*)

Presented Maltese Tertiary Invertebrata, 1839.

Austin (THOMAS, Fort-Major) [1795-1881]

Having early retired from the army, with the loss of a leg, Major Austin settled for the rest of his life in Bristol. Among other scientific studies he devoted much attention to Fossil Echinoderms, especially the stalked forms, upon which, either alone or in conjunction with his son Thomas, he published several papers in the *Annals and Magazine of Natural History* between 1842 and 1851. The "Monograph on Recent and Fossil Crinoidea" by the same authors was begun in 1843 and stopped unfinished in 1849. Austin's own collection is in the Bristol Museum, but several of the specimens illustrated in the Monograph have come into the possession of the nation, e.g. *Pentacrinites briareus*, frontispiece; *P. johnsonii*, pl. xv., and *Poteriocrinus pentagonus*, pl. xi., f. 2a, from the J. R. Johnson collection, 1845; *Extracrinus briareus*, pl. xii., f. 1b, from Canon J. E. Jackson, 1887. Of several specimens from the Carboniferous Limestone of Cleveland Bay, found by Miss Rich and purchased from Wm. Rich, 1867, those figured on pl. ix., ff. 4a, b, c, and pl. xi., f. 2d, have been identified.

Austin (THOMAS, Junior, Civil and Mining Engineer)

See AUSTIN, THOMAS, Fort-Major.

Australian Museum, Sydney

Presented plaster casts of skulls of *Diprotodon* and *Nototherium* in 1858, and Marsupial remains from the Wellington caves in 1870.

Avebury (JOHN LUBBOCK, 1st Baron)

Presented part of skull of musk-ox (*Ovibos moschatus*) from Maidenhead in 1856, two Eocene fishes (*Diplomystus* and *Mioplosus*) from Wyoming in 1886, and Nummulitic Limestone from Mürren in 1894.

Aylesford (Countess of)

Presented Ichthyolites from Loughborough, 1817.

Baber (JAMES) [-1887]

While carrying on the business of an oil-cloth manufacturer in Knightsbridge, Baber accumulated a large collection of fossils, which was always open to public view, and was more than once alluded to by his friend, Prof. John Morris. It is supposed to have contained the type of *Nautilus baberi*, Morris and Lycett, 1850, but this specimen has been lost sight of. On the owner's death the collection was broken up, a selection of a miscellaneous character being acquired by the British Museum in 1889 from Mrs. Baber, while another portion was selected for the Museum of Aberdeen University, and the remainder was disposed of by auction at Stevens' Rooms in 1890.

Bain (ANDREW GEDDES) [-1864]

For many years Bain was engaged in constructing roads in Cape Colony, and in the course of this work he first noticed the remains of Fossil Reptiles in the Karoo Formation of that country. He sent all specimens found by him to England, where most of them were described by Owen. His first collection, including the original skulls of *Oudenodon bairni* and *Dicynodon leoniceps*, was presented by him to the British Museum in 1853. Other important donations followed, and after his death, his son, Mr. Thomas Bain, who was also a road surveyor, continued

to add to the collection. The Invertebrata and two Fishes, described by D. Sharpe and others in A. G. Bain's memoir "On the Geology of South Africa" (*Trans. Geol. Soc.*, 1856), are preserved in the Museum of the Geological Society.

Baker (ANNE ELIZABETH) [1786–1861]

The sister of George Baker, Miss Baker contributed to his great "History of the County of Northampton" (1822–41) the chapters on geology and botany, and herself published a "Glossary of Northamptonshire Words and Phrases." Lack of support forced Baker to sell his library and collection of MSS. in 1842, and in the following year the geological collection was purchased for the Museum from his sister. It comprised Pleistocene vertebrates and Jurassic vertebrates and invertebrates, all from Northamptonshire, including a Fossil Fish—a *Lepidotus* from Nine Churches—figured by Miss Baker in the "History" and mentioned by Agassiz (*Poissons fossiles*). Gunned on the specimens are white paper labels with the localities in a fine, clear handwriting.

Baker (JOHN)

Invertebrata from Upper Greensand, Warminster, purchased 1849.

Baker (General Sir WILLIAM ERSKINE)

Presented skull of *Elephas ganesa* from Siwalik formation of India in 1845, Tertiary Invertebrata from Sind in 1849 and 1855.

Ball (JOHN)

Pleistocene Mammalia from Thames Valley, purchased 1844.

Ball (JOHN, F.R.S.)

Presented Miocene Mollusca from Morocco, 1885.

Balston (WILLIAM EDWARD)

Presented Devonian fossils from South Africa, 1885.

Barnes (JOHN)

Presented English Lower Carboniferous Invertebrata, 1897.

Baron (RICHARD)

The Rev. R. Baron, a missionary in Madagascar, has studied the geology of that country and published papers thereon in the *Antananarivo Annual* and in the *Quarterly Journal* of the Geological Society (1889 and 1895), these latter being accompanied by descriptions of the fossils collected by Mr. Baron, from the pen of Mr. R. B. Newton. These specimens have been presented by Mr. Baron to the British Museum, and comprise 250 Eocene and Jurassic fossils, given in 1889; the type-skull of *Steneosaurus baroni*, R. B. Newton, received and described in 1893; and 135 fossil invertebrates and plants, handed over in 1895.

Barrande (JOACHIM) [1799–1883]

In 1831, Barrande settled in Bohemia as tutor, and subsequently steward, to Prince Henri de Chambord, and soon turned his attention to elucidating the geology and palæontology of the Lower Palæozoic (Cambrian

to Devonian) rocks of his adopted country, publishing the results mainly in the great work, entitled "Système Silurien du Centre de la Bohême," of which the first volume was issued in 1852, and which is still continued by a committee. His vast collections were made by specially retained and systematically instructed workers, and the greater part, including the specimens figured in his works, was bequeathed to the "Museum des Königreichs Böhmen" in Prague. An extensive series of fine specimens was, however, sent by Barrande to the British Museum, in three separate lots, during the years 1854-6, and these were purchased in the Januaries of 1855, 1856, and 1857. The following is the résumé of the three sendings, certified as correct by Barrande himself:—

	Spp.	Specimens.
Trilobites	200 ..	1515
Crustacés divers	24 ..	104
Céphalopodes	132 ..	595
Pteropodes	29 ..	146
Gastéropodes	115 ..	446
Acéphalés	46 ..	229
Brachiopodes	138 ..	1516
Echinodermes	9 ..	47
Graptolites	15 ..	131
Polypiers	22 ..	81
Incertæ Sedis	11 ..	40
Fucoides	3 ..	10
	<hr/>	<hr/>
	744	4860

Each specimen is accompanied by a lithographed label, giving its name, horizon, and locality; and thus, though not the actual originals, the collection is a most important aid to the study of Barrande's publications. It has been supplemented by subsequent purchases from the Bohemian Museum, through Dr. A. Fritsch, *e.g.*, of Trilobites in 1897.

Barrett (LUCAS)

Presented a Hippurite (*Barrettia monilifera*) from the Cretaceous of Jamaica, 1862.

Basadre (DON MODESTO)

Presented remains of *Scelidotherium* from Pleistocene of Tarapaca, Peru, 1886.

Bateson (WILLIAM)

Presented Eocene fossils from the Sea of Aral, 1888.

Bather (FRANCIS ARTHUR)

Collected and presented Silurian fossils from Gotland in 1893; Pleistocene shells from New Zealand and Palæozoic crinoids from North America in 1894; various Russian fossil Invertebrata in 1898.

Baugh (THOMAS)

Collected fossils from the Carboniferous Limestone of Shropshire and associated formations; his whole collection, including many teeth and spines of fishes, purchased 1870.

Baynes (DONALD S.)

Presented remains of human skeleton from Tilbury Docks, 1887.

Bean (WILLIAM)

The son of a market-gardener, to whose business at Scarborough he succeeded, Bean was also a cousin of William Smith and a pioneer in Yorkshire geology. In association with John Williamson (father of Wm. Crawford Williamson) he amassed, during the first half of the nineteenth century, such a collection from the Yorkshire coast as can never be made again. A few of his fossils went with Williamson's collection to the founding of the Scarborough Museum; in 1844 some were presented to the Museum of the Yorkshire Geological Society, now at Leeds; others are in the York Museum. But in 1859 the finest specimens of Bean's collection, numbering 2588 and representing 1392 species, were bought by the Trustees. They included a remarkable series of Oolitic plants from the shales of Gristhorpe and Haiburn, near Scarborough, some of which are the originals described by Adolph Brongniart, Lindley and Hutton, Prof. J. Phillips, and Bunbury; sponges from the Chalk of Flamborough; corals and molluscs from Malton; cephalopods from the Lias, Kelloway Rock and Speeton Clay; and molluscs and mammals from the Postpliocene of Bridlington. The specimens are provided with oblong white paper labels, often gummed on, written in a neat, rounded, back-hand, surrounded by a ruled ink line.

Beche (Sir HENRY T. DE LA)

Presented English and French Jurassic and Cretaceous fossils, 1837.

Becher (H. M.)

Presented Jurassic fishes (*Lycoptera sinensis*) from Shantung, China, 1892.

Beckles (SAMUEL HUSBAND) [-1890]

Beckles was a resident of St. Leonards and made a large collection of fossils from the Wealden strata of that neighbourhood, besides acquiring a few important specimens from the Chalk of Sussex and from other formations. He discovered footprints of *Iguanodon* in the Wealden sandstone near Hastings, and described these in *Quart. Journ. Geol. Soc.*, 1851, 1852, 1854, 1862. He also obtained valuable portions of skeletons of *Iguanodon* and other Dinosauria from the same formation, which were described by Sir Richard Owen in the *Monographs* of the Palæontographical Society. In 1856, with the aid of a grant from the Royal Society, Beckles explored the Purbeck Beds near Swanage, and made the most important collection of Mesozoic Mammalian remains hitherto known from Europe. This exploration furnished evidence of two species of a new genus, *Plagiaulax*, described by Falconer in *Quart. Journ. Geol. Soc.*, 1857; and the whole collection was subsequently described by Owen in his "Fossil Mammalia of the Mesozoic Formations" (*Palæont. Soc.*, 1871). With the Mammalia were also remains of dwarf crocodiles and other Reptilia described by Owen in the *Monographs* of the Palæontographical Society. The Purbeckian collection was purchased by the Trustees from Beckles in two instalments in 1876, 1877. One slab of footprints of *Iguanodon* was presented by him in 1888. The Wealden and general collection, comprising about 500 Vertebrata and 2000 Invertebrata, was purchased from his executor in 1891.

Beecke (B. VAN)

Collected Mammalian remains from caverns of Sundwig, Westphalia; this collection purchased at a sale, 1853.

Belcher (*Admiral Sir EDWARD*) [1799-1877]

Appointed in 1852 to the command of an expedition to the Arctic in search of Sir John Franklin, Belcher published in 1855 an account of it entitled "The Last of the Arctic Voyages." His collection of Arctic fossils was transferred from the Museum of Practical Geology in 1880.

Bell (ALFRED)

See BELL, ROBERT GEORGE.

Bell (ROBERT GEORGE) [1833-1888]

Robert Bell, who, with his brother Alfred, was known as a careful worker in the British Pliocene rocks, was often employed as a collector by others. Thus the Museum possesses three collections made by him. First, his own, bought of his executors in 1888, and comprising 2730 specimens of Lamellibranchia, Gasteropoda, and Polyzoa, from the Crag, mounted on cards, named, and accurately localised. Secondly, a series of Pliocene shells from St. Erth, Cornwall, referred to by Bell and P. F. Kendall (*Quart. Journ. Geol. Soc.*, 1886); this was the property of S. V. Wood, jun., by whose widow it was presented in 1886. Lastly, a collection of 3391 Crag Mollusca from Suffolk, representing 420 species, some figured in S. V. Wood's Monograph (*Paleont. Soc.*); this was the property of a Mr. Groom (*alias* Groom-Napier, styling himself Prince of Mantua and Duke of Montferrat), from whose executors it was purchased, through R. F. Damon, in 1894.

Bell (THOMAS)

Fossil Chelonia purchased from his collection, 1863.

Belt (*Mrs.*)

Presented non-marine Mollusca from Pleistocene deposits of Brentford and Kew, 1891.

Benett (ETHELDRED) [17 -1845]

"For more than a quarter of a century, Miss E. Benett," of Norton House, near Warminster, Wilts, "pursued with ardour and success the investigation and collection of the organic remains of her native county. . . . To her zeal and talents and the liberal encouragement she gave the local collectors, we are in a great measure indebted for our knowledge of the fossils of the Chalk and Greensand of Wiltshire, and more particularly of those in the neighbourhood of Warminster and Tisbury. . . . Her best specimens were liberally presented to any individual or public museum when the advancement of science would be thereby promoted" (*London Geol. Journ.*). The encouragement of local collectors led to many of her specimens being ingenious reconstructions from fragments of several individuals or even species (*Op. cit.*, p. 128). No such suspicion, however, attaches to the fossil sponges discovered in the Greensand by Geo. Warren of Warminster, collected for the most part by J. Baker of that place, and described and figured by Miss Benett in "A Catalogue of the Organic Remains of the County of Wilts" (privately printed, 1831), as well as in

a MS. volume presented to the Geological Society in 1816. Among numerous references to Miss Benett by Mantell, we read that "An elegant Memoir on the Wiltshire Fossils, by this accomplished lady, appears in Sir R. C. Hoare's 'Wiltshire'" ("Medals of Creation," 1844, i. p. 260).

Several donations of Wiltshire fossils were made by Miss Benett between 1816 and 1830. In 1831, she presented "a fine specimen of a new species of *Pentacrinus* from Farleigh, near Bath," and in 1841 some crinoids and other fossils from the Carboniferous Limestone, all the latter with a small printed label, "Whatley, nr. Frome, Somerset." Finally, in 1893, 112 Eocene shells from Grignon, collected by Miss Benett in 1822, were presented by Mr. J. Benett Stanford. Other museums that profited by Miss Benett's liberality were those of Bristol and of the Geological Society. Many of her specimens were figured in Sowerby's "Mineral Conchology," but are now lost sight of. It appears that, on her death, the most valuable of the specimens remaining in her collection were purchased by Thomas Wilson of Newark, Delaware, U.S.A., to be incorporated in a very extensive collection in all branches of natural history that he was forming at Philadelphia (*London Geol. Journ.*, part 2, p. ii. of wrapper). This collection is now in the possession of the Philadelphia Academy.

Bennett (GEORGE) [1804-1893]

While in medical practice in Sydney from 1836 until his retirement, Bennett employed his leisure in natural history researches. He collected the fossil bones from the river deposits of New South Wales and Queensland, and, from 1872 onwards, sent numerous donations to the British Museum for description by Owen. Most of these remains were referable to marsupials, but there were also some vertebræ of the gigantic lizard, *Megalania prisca*. Mr. G. F. Bennett, his son, also collected similar bones, and in 1880 he transmitted to the Museum the original skull and tail-sheath of the horned tortoise, *Miolania oweni*.

Bennett (G. F.)

See BENNETT, GEORGE.

Bennie (JAMES) [1821-1901]

As fossil-collector to the Geological Survey of Scotland, Bennie discovered several interesting species, and his name was associated with the blastoids *Phænoschisma benniei* and *Astrocrinus* (i.e., *Zygocrinus*) *benniei*, of which he presented 27 specimens to the Museum in 1886. In 1888 he presented 9 microscope-slides of sponge-spicules from the Carboniferous of Ayrshire, many of which had been figured by Dr. G. J. Hinde in his Monograph of British Fossil Sponges (*Palæontogr. Soc.*, 1887-88).

Bensted (W. H.)

Presented Cretaceous plant-remains from Maidstone, 1839.

Berendt (GEORG CARL)

Amber containing insects and plant-remains, purchased 1847.

Bigsby (JOHN JEREMIAH) [1792-1881]

In early life, Bigsby, who is best known as author of the "Thesaurus Siluricus" (1868) and "Thesaurus Devonico-Carboniferus" (1878),

travelled much as a Medical Officer in Canada in connection with the Boundary Commission, and made a large collection of Palæozoic fossils both in that country and in the north-east part of the United States. The results of his researches were published chiefly in Silliman's *American Journal of Science* between 1820 and 1827. He presented his collection to the British Museum in 1851. Other specimens from the Lower Palæozoic rocks of Canada, presented by him to the Museum of Practical Geology, were transferred to the British Museum in 1880.

Binkhorst (J. F.)

Belgian Tertiary Mollusca, purchased 1857.

Birch (Colonel)

In 1820, some Chalk Echinoderms and some fossils from the Dorsetshire Lias were presented by this gentleman, who lived at Bath. The rest of his collection, which was sold at auction on May 15, 1820, by Bullock "in his Egyptian Hall, Piccadilly," included valuable remains of Reptilia and Crinoidea from the Lias of Lyme and Charmouth, many collected by Miss Mary Anning. (See G. A. Mantell, *London Geol. Journ.*, p. 13; 1846). Several of these were bought for the British Museum, which also possesses the copy of the sale-catalogue that belonged to "the fossil shop at Lyme," signed Joseph Anning.

Bishop (Mrs.)

See SMITH [Mrs.] M. H.

Blackmore (HUMPHREY PURNELL)

Presented Cretaceous Polyzoa, 1897.

Blake (JOHN FREDERICK)

Teleosaurian skull from Upper Lias of Whitby and *Pelobatochelys blakei* from Kimmeridge Clay of Weymouth, purchased 1880. Jurassic Invertebrata from Normandy, purchased from Mrs. J. F. Blake, 1895.

Bland

Presented *Ichthyosaurus* from the Lias of Balderton, Nottinghamshire, 1826.

Blanford (WILLIAM THOMAS) [1832-]

Dr. Blanford, late of the Geological Survey of India, accompanied an expedition to Abyssinia in 1868 as geologist. He published a volume, "Observations on the Geology and Zoology of Abyssinia," in 1870. He presented his collection of Abyssinian fossils, including the specimens described in his work, to the Museum, 1869.

Bloemfontein Museum

Skulls of *Tritylodon longævus* and *Rhytidosteus capensis* from the Karoo Formation of South Africa, obtained by exchange, 1884.

Bosquet (J.)

Cretaceous and Tertiary Entomostraca, purchased 1870.

Boury (E. DE)

Presented Paris Eocene Mollusca, 1889.

Bowerbank (JAMES SCOTT) [1797-1877]

A wealthy citizen and distiller of London, Bowerbank accumulated, mainly from British localities and from every horizon, a large collection of fossils, which served as the basis of important researches by himself and others, and was always open to scientific students. Many of the specimens are described in the Monographs of the Palaeontographical Society, of which he was founder and first president. He wrote a book on the "Fossil Fruits of the London Clay" (1840), but is chiefly known for his later researches on Sponges. His collection of fossils was purchased for the Museum in two instalments in 1865. It included, besides the Fruits just mentioned, reptilian remains from the London Clay, Chalk, and Wealden; Crustacea from the London Clay, Greensand, and Oolite; Cirripedia and Polyzoa from the Crag; Lower Tertiary Mollusca; Chalk Echinoidea—all figured in the Monographs of the Palaeontographical Society. There were many other fossils of all kinds, some figured in various works. No special form of label ever accompanied the Bowerbank specimens.

Brady (Sir ANTONIO) [1811-1881]

Brady began to collect mammalian remains from the Thames brick-earth near his residence at Ilford, Essex, in 1844. In his later years, he was aided by William Davies (Assistant in the Geological Department of the British Museum), who prepared a "Catalogue of the Pleistocene Vertebrata in the Collection of Sir Antonio Brady," privately printed in 1874. All the specimens bear printed labels according to this Catalogue. The whole Collection was purchased in 1873.

Brady (FRANCIS)

Presented Carboniferous cores from Dover boring, 1893.

Brady (HENRY BOWMAN)

Presented Post-Tertiary shells from Solomon Islands, 1887.

Brander (GUSTAVUS) [1720-1787]

Of a Swedish family, but born in the city of London, Brander met with success both in business and civic affairs, and, as a patron of the arts and sciences, he was elected a Trustee of the British Museum. While at his country residence at Christchurch, Hants, he collected Eocene fossils "out of the cliffs by the sea coast between Christchurch and Lymington, but more especially about the cliffs by the village of Hordwell"—from Barton Cliff, according to Mantell ("Geol. I. of W.," p. 124). A set of these, chiefly consisting of mollusc shells, was presented by him to the Museum in 1765, and was described by his fellow-countryman, D. C. Solander, an officer of the Museum, in a work entitled "Fossilia Hantoniensia collecta, et in Musaeo Britannico deposita a Gustavo Brander," London; 1776. In this book 131 specimens were figured and many new species described, but the collection was doubtless larger. Now, however, only 124 specimens are recognised as having belonged to it, and some of these may belong to subsequent donations of the same kind, which were made by Brander. Forty-two of these

specimens are regarded as the originals of Solander's figures, and they are included in Mr. R. B. Newton's "Systematic List of F. E. Edwards' Collection," published by the Trustees in 1891. The original labels, if there were any, have long been lost, and those now preserved on the back of the tablets are in the handwriting of S. P. Woodward. The collection has occasionally been referred to as "The Solander Fossils"; next to the Sloane Collection, it is the oldest in the Geological Department.

Braun (F.)

German Triassic and Jurassic fossils, purchased 1837, 1839.

Braun (F.)

Devonian star-fishes from Bundenbach, purchased 1883.

Bravard (AUGUSTE)

Like Pomel (*q.v.*) a native of Auvergne, Bravard made a collection of Tertiary Mammalia and other Vertebrata from Vaucluse, Allier, and Puy-de-Dôme, with some Pleistocene bones (chiefly *Ursus*) from the caverns of Lozère. Deported, for political reasons, to Cayenne, he contrived in 1852-53 to make another valuable collection chiefly of Mammalia from the Pampa Formation of the Argentine Republic. These two collections were carefully catalogued by him, and each specimen was numbered in accordance with the catalogue, which was intended to be the basis of Memoirs never published. The French collection was purchased by the Museum from Bravard in 1852, the South American collection in 1854.

Bree (C. R.)

Presented rostrum of *Ziphius planirostris* from Southwold, 1878.

Brickenden (Major RICHARD THOMAS WILLIAM LAMBERT).
[1809-1900]

Major Brickenden published a few notes on the geology of Moray, Scotland (*Quart. Journ. Geol. Soc.* 1851, 55), and made a fine collection of about 100 fish-remains from the Upper Old Red Sandstone of Scaat Craig, near Elgin. This collection was briefly referred to in the last of the aforesaid notes, and was sold by him to the Museum in 1896. In the early part of his career, Brickenden also collected fossils in Sussex, and found at Cuckfield the first known mandibular ramus of *Iguanodon*, which he developed and presented to Mantell (see *Phil. Trans.*, 1848, and "Petrifactions and their Teachings," p. 241).

Bright (BENJAMIN) [-1900]

See BRIGHT, RICHARD.

Bright (BENJAMIN HEYWOOD) [1787-1843]

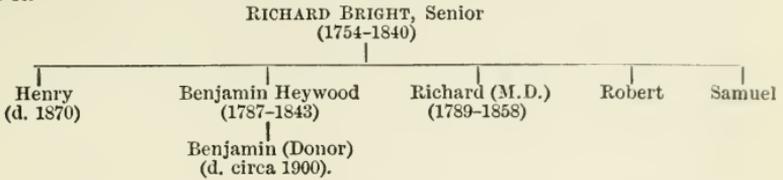
See BRIGHT, RICHARD.

Bright (HENRY) [-1870]

See BRIGHT, RICHARD.

Bright (RICHARD) [1754-1840]

The history of this interesting collection, now divided between the Departments of Geology and Mineralogy, is somewhat complicated, so that it is well to tabulate the names and relationships of those connected with it.



Richard Bright, Senior, lived at Ham Green, on the Avon, near Bristol, in which city he was a merchant and banker. A commercial connection with the mines of Cornwall made him an early collector, and in this he was assisted by William Smith and Richard Phillips. It was in the fields adjoining his house at Ham Green that the now well-known deposits of sulphate of strontian were first discovered. He took advantage of the examination of caves in the Mendips and elsewhere to gather one of the earliest series of the bones of extinct mammals. To these he added fossil vertebrates from other localities, such as fishes from Monte Bolca and the Lebanon, and even the remains discovered at the base of the Himalayas a few years before his death. He was one of the founders of the Bristol Institution (1822), and to it he presented some interesting specimens. J. S. Miller, in his "Natural History of the Crinoidea" (1821), mentions having used specimens obtained by Richard Bright "from the transition limestone on his estate near the Malvern Hills."

Henry, the eldest son, who inherited Crawley, is not known as a geologist, but he "had a turn for science and was a collector, especially of chalk and flint fossils."

The second son, Benjamin Heywood, went to live at Brand Lodge, and when the railway from Malvern to Ledbury was made through the Brockbury estate, he gave great attention to the cutting, and collected many Silurian fossils. These were kept at Brand Lodge, and are specially mentioned by Murchison, who borrowed many of them to figure in his "Silurian System" (see p. 414 of that work). It is possible that these were among the specimens handed over by Murchison to the Geological Society; but they have not been identified either there or in the British Museum.

The reputation that the third son, Richard, gained as a geologist, through studies at Bristol, in Iceland, and in Hungary (see *Trans. Geol. Soc.*) was eclipsed by his fame as physician at Guy's Hospital and as discoverer of the disease that bears his name. It is highly probable that he contributed specimens to his father's collection, as he appears also to have done to both the Geological Society and the Bristol Institution. But this was only in his earlier years.

The fourth son, Robert, who remained in Bristol as a merchant, cultivated art and literature rather than science, but is of interest because it was to him that Rule sold the piece of Moa bone that he had brought from New Zealand in 1839—the first portion of a *Dinornis* that came to this country, and the fragment from which Owen inferred the existence of this extinct race of gigantic birds.

It thus appears that there were three Bright collections: the Bristol one, chiefly minerals and vertebrates; the Brand Lodge one, chiefly Silurian invertebrates; and the Crawley one, chiefly Chalk invertebrates.

On the death of Richard Bright, senior, Ham Green was left to Benjamin Heywood, who sold it, and either took the whole collection to Brand Lodge or handed it over to Henry at Crawley. In any case, when B. H. Bright died three years later, his son Benjamin inherited Crawley, and presented the collection to the British Museum in 1873. The onerous task of repacking was accomplished by William Davies of the Geological Department. Besides the valuable minerals and the vertebrate remains, there were over 3000 fossil invertebrates, chiefly British, but from having been left in rooms exposed to damp, mice, and nesting birds, all manuscripts and labels had perished.

[For details of family history thanks are due to Dr. J. Franck Bright, Master of University College, Oxford, and a son of Dr. R. Bright.]

Bright (RICHARD) [1789–1858]

See BRIGHT, RICHARD.

Bright (ROBERT)

See BRIGHT, RICHARD.

British Association

Presented Middle Eocene plant remains from Alum Bay, Isle of Wight, in 1867; remains of Vertebrata and Mollusca from the caverns of Borneo, 1879.

Brodie (PETER BELLINGER) [1815–1897]

Brodie's love for geology begun under the influence of Wm. Clift, curator of the College of Surgeons, was fostered by Sedgwick at Cambridge, and he was the first to collect land and fresh-water shells from the Pleistocene deposit of Barnwell. In 1838 he went as curate to Wylve, north of the Vale of Wardour, where he discovered *Archæoniscus brodiei*. Appointed in 1840 to a curacy in Buckinghamshire, he collected in the Portland and Purbeck beds near Aylesbury. For the next thirteen years he was rector of Down Hatherley in the Vale of Gloucester, and collected largely in the Rhatic, Liassic, and Oolitic rocks of the district, reading geological papers before the Geological Society and the Cotteswold Field Club. From 1853 until his death he was vicar of Rowington, Warwickshire, where he occasionally met with rare fossils in the Keuper Formation, and extended his researches to the Upper Silurian of Herefordshire and the Jurassic rocks of Northamptonshire and Leicestershire. All specimens collected by him bore an exact record of the formation and locality whence they were obtained, sometimes with other memoranda, the labels being in his own handwriting on miscellaneous scraps of paper, and usually gummed to the matrix. Brodie's general collection of over 25,000 fossils included many valuable type-specimens, and an extensive selection from it was purchased by the Trustees of the British Museum in 1895. The rest was dispersed among various museums abroad, the principal part being purchased by the University of Vienna. His special collection was that of fossil insects, illustrating his small volume, "A History of the Fossil Insects in the Secondary Rocks of England" (1845), prepared with the aid of Prof. J. O. Westwood, and several later papers. This unique collection, the principal work of his scientific career, was retained by Brodie until his death, and was purchased by the Trustees from his executors in 1898. Brodie also made several small donations to the Museum from 1853 onwards. His numerous gifts to the Warwickshire Natural History Society, of which he was elected president in 1894, embrace many rare and fine fossils. In addition to the fossil insects, the

specimens at various times acquired by the nation from Brodie include the types of the following species:—*Eurypterus brodiei*, H. Woodward; *Alaria solida*, *Patella inornata*, and *Solarium cotteswoldiae*, all of Lycett; *Thracia brodiei*, R. B. Newton; *Teudopsis brodiei*, Carruthers; *Lingula ovalis*, Sowerby; *L. brodiei*, Davidson; *Acoura brodiei*, *Ophiolepis ramsayi*, *Echinobrissus brodiei*, and *Hemicidariss brillensis*, all of Wright; *Actinometra cheltonensis*, *Antedon incurva*, and *A. laticirra*, all of P. H. Carpenter; *Montlivaltia victoriæ* and *M. ruperti* of Duncan; *Craticularia calathus* and *Platychonia brodiei* of Sollas; *Araucarites brodiei*, Carruthers; and *Equisetum brodiei*, Buckman; besides a large number of other figured specimens.

Brome (Capt. Fox)

Collected mammalian remains from the caverns of Gibraltar, presented by the Governor of Gibraltar, 1876.

Broom (ROBERT)

Presented bone-breccia with remains of *Burramys*, *Perameles*, &c., from the Wombeyan Caves, New South Wales, 1896.

Broughton

Presented Tertiary shells and corals from Jamaica, 1795.

Brown (C. BARRINGTON)

Collected and presented Tertiary Mollusca from the Upper Amazons, 1879.

Brown (HENRY YORKE LYELL)

Presented fossil Invertebrata from Western Australia, 1879.

Brown (JOHN) [1780–1859]

Brown's attention was attracted to geology while working as a stonemason at Braintree and Colchester. On retiring from business in 1830, he removed to Stanway, near Colchester, and devoted the remainder of his life to scientific research and to the collection of fossils in Essex. He discovered and preserved a large series of Pleistocene Mammalian remains, and also collected Pleistocene non-marine Mollusca at Copford. In addition to supplying the museums at Oxford and elsewhere with Crag fossils, he made small donations to the British Museum in 1849 and 1852, and bequeathed the whole of his collection to Sir Richard Owen, who transferred it to the Museum in 1860.

Brown (JOHN ALLEN)

Presented Pleistocene non-marine Mollusca from Staines, 1890.

Brown (JOSHUA)

Presented supposed fossil eggs of reptiles from the Great Oolite of Cirencester, 1863.

Browne (MONTAGU)

Presented a specimen of *Ichthyosaurus intermedius*, from the Lower Lias of Barrow-on-Soar, showing integument of paddle, 1889; a fossil insect, *Palæotermes ellisi*, from the same formation and locality, 1892.

Brownrigg (W. B.)

Remains of Labyrinthodonts and a few fishes from the Coal Measures of Kilkenny, Ireland, purchased 1870.

Brückmann

Cretaceous and Tertiary fossils from Switzerland and adjoining parts of Germany, purchased 1858.

Brusina (SPIRIDION)

Presented Tertiary shells from Dalmatia and Croatia, 1882.

Brussels Royal Museum of Natural History

Plaster cast of skeleton of *Iguanodon bernissartensis* received in exchange, 1895.

Buckingham (Duke of)

Type-specimen of *Plesiosaurus dolichodeirus* from the Lower Lias, Lyme Regis, purchased at his sale, 1848.

Buckman (JAMES)

See BUCKMAN, S. S.

Buckman (SYDNEY SAVORY)

Mr. Buckman, now resident near Cheltenham, has studied especially the Jurassic rocks of the south-west of England, and made a collection chiefly of Mollusca and Brachiopoda, the horizons of all his specimens being determined with the utmost exactness. The British Museum has purchased from him several small series of these fossils since 1890; but the type-specimens of his Memoir on "Inferior Oolite Ammonites" (Palæontogr. Soc.) were purchased from him by the Woodwardian Museum, Cambridge. Mr. Buckman has also made several donations, including fossils formerly in the cabinet of his father, Prof. James Buckman.

Buist

Presented Mammalian remains from Perim Island, 1848.

Bullen (ROBERT ASHINGTON)

Collected and presented Pleistocene Mollusca from the Rubble Drift of Portland and Sangatte (France), 1896.

Buller (Sir WALTER)

Feathers of *Dinornis* from New Zealand, purchased 1887.

Burney (Lieut.-Col.)

Presented Pliocene Mammalian remains from Burma, 1841.

Burckhardt (RUDOLPH)

Presented *Otenostreon* from Jurassic of Basle, 1900.

Burnett (Mrs.)

Presented various British fossils, 1882.

Burrows (HENRY W.)

Collected and presented Oligocene and Miocene Mollusca from Bordeaux, 1894.

Busk (GEORGE) [1807-1886]

After twenty-five years' practice as surgeon, Busk devoted himself to scientific pursuits, especially to the study of Polyzoa, of which he wrote the British Museum Catalogue (1852-54). He also collected fossil

Polyzoa, and prepared a "Monograph of the Crag Polyzoa" (Palæontogr. Soc., 1859), based largely on the collections of S. V. Wood and J. S. Bowerbank (*qq.v.*). His own collection of 772 specimens, including some described in his Monograph, was presented to the Museum by the Misses Busk in 1899.

Butler (FRANCIS H.)

A dealer from whom numerous purchases have been made, including the Thomas Wright Collection (1887), part of the John Gray Collection (1889), the Widger Collection of Pleistocene Mammalia, &c., from the Tor Bryan caves, Torquay (1892), plates of *Homosteus milleri* from the Caithness Old Red Sandstone (1894), Dr. Forsyth Major's Collection of Pliocene Mammalia from Olivola (1895), French Cretaceous Polyzoa (1898), and Upper Silurian Fishes from Lanarkshire (1899 and 1900).

Buy (WILLIAM)

Buy was a labouring man who lived at Chippenham, Wilts, and collected fossils in the neighbourhood, especially the wonderfully preserved Cephalopoda from the Oxford Clay of the Great Western Railway cutting at Christian Malford. His collection was made use of by J. Morris in preparing his "Catalogue of British Fossils" (1854). In describing a "very fine belemnite" in the Museum (*B. puzosianus*), Mantell tells his readers that it was "collected by Mr. Buy . . . who is well known for his skill and sagacity in discovering and developing fossils of this kind" ("Petrifactions and their Teachings," p. 458; 1851). The Museum made several purchases from him between the years 1846 and 1863.

Calder (DONALD)

Collected numerous fish-remains from the Old Red flagstones of Caithness, including plates of *Homosteus* purchased through F. H. Butler, 1894.

Cameron (E. S.)

Presented Cretaceous and Tertiary Mollusca from Montana, 1890.

Camper (PETER)

Presented mandibular ramus of *Mosasaurus camperi* from the Upper Cretaceous of Maastricht, 1784.

Canada, Geological Survey of

Presented *Pteraspis* from Nova Scotia, 1899.

Canterbury Museum

Presented jaw of *Mastodon andium* from Chili, 1868.

Canterbury Museum, N.Z.

Nearly complete skeleton of *Dinornis maximus* received in exchange, 1874.

Capron (J. RAND)

Mr. Capron, a solicitor of Guildford, made an important collection of about 1400 Chalk fossils, especially fishes, from the south-east of England, and sold it to the Museum in 1879. All the specimens bear printed labels indicating the precise locality whence they were obtained.

Carpenter (J. ESTLIN)

See CARPENTER (W. B.).

Carpenter (PHILIP HERBERT) [1852-1891]

The fourth son of W. B. Carpenter, and author of the "*Challenger*" Reports on Crinoidea, Carpenter was associated with R. Etheridge, Junior, in the preparation of the "Catalogue of the Blastoidea in the... British Museum" (1886). In connection with this work he obtained specimens, chiefly from Spain, and, after figuring, presented them to the Museum.

Carpenter (WILLIAM BENJAMIN) [1813-1885]

In his later years Dr. Carpenter accumulated an extensive series of specimens, preparations, and drawings to illustrate the nature of *Eozoon canadense*, and its resemblances to various Foraminiferal skeletons and mineral structures. At the time of his death this research was incomplete, and the whole collection of materials was presented to the British Museum by his son, Rev. J. Estlin Carpenter in 1892.

Carruthers (WILLIAM)

Presented Palæozoic fossils from South Africa, 1887.

Carter (HENRY JOHN) [1813-1895]

While a medical officer in Bombay, Carter occupied himself with researches on sponges and the skeletons of other low invertebrates. He also studied the geology of Western India and collected fossil specimens of the groups in which he was interested. He made five small donations to the Museum between 1882 and 1889, including Foraminifera, sponges, and stromatoporoids, some illustrative of his own writings. He also collected about 100 fragments of Vertebrata from the Trias near Sidmouth, Devonshire, where he subsequently resided. This collection was described by A. T. Metcalfe in the *Quarterly Journal* of the Geological Society (1884), and was presented by Carter to the Museum in 1883.

Castelli (F.)

A selection of 1272 North Italian fossils was purchased through Mr. R. F. Damon from the Castelli Museum, Leghorn, on its dispersal in 1898. The mammalian fragments included teeth of *Semnopithecus*, *Antilope*, and *Hipparion* from Lower Pliocene, Casino, described by Ristori and Forsyth Major; also teeth of *Equus caballus* from Monte Tignosa, described by Forsyth Major.

Cautley (Sir PROBY T.) [1802-1871]

Colonel Cautley and Dr. Hugh Falconer (*q.v.*) devoted their leisure for eight years to the discovery of mammalian and reptilian remains in the Lower Pliocene sandstones of the Siwalik Hills, India. The whole collection, contained in 214 cases, each weighing about 4 cwt., was sent to England in 1840 by Cautley, who offered it to the Geological Society, but, for want of room, it had to be declined and was placed in the British Museum, whose masons were occupied for several years in extracting the fossils from their hard matrix. A few fish-remains from the same formation were subsequently presented by Cautley in 1847. The collection was intended to form the subject of Falconer and Cautley's "*Fauna Antiqua Sivalensis*," for which many plates were drawn, but of which only nine small fasciculi were published (1844-47). Falconer's notes on the specimens, with copies of many unpublished figures, were included in his posthumous "*Palæontological Memoirs*," edited by Charles Murchison, M.D., F.R.S.

Cawdor (*Earl of*)

Presented Silurian Trilobites, 1836.

Chadwick (SAMUEL)

Collected fossil sponges from Coral Rag and Chalk of Yorkshire, purchased 1895.

“Challenger” Deep-Sea Deposits

On the completion of Messrs. Murray and Renard's Report on the Deep-sea Deposits collected by the *Challenger*, the whole series of specimens was received by the Department of Geology in 1895.

Chantre (C.)

Presented Coal-plants from St. Etienne, France, 1881.

Chapman (FREDERICK)

Collected and presented Pleistocene non-marine Mollusca from Fulham, 1890. Collected and prepared Foraminifera and Ostracoda from the Chalk and Gault, purchased 1892-94.

Charlesworth (EDWARD)

Sold many fossils to the Museum, including the Crag Mollusca described in Searles Wood's "Supplement," 1869, and various Mammalian remains from the Red Crag, 1875.

Cheadle (ROBERT W.)

Presented teeth of *Ovibos moschatus* from Crayford, 1879.

Chester (GREVILLE J.)

Presented tusk of mammoth from Norfolk coast, 1865.

Chevalier (N.)

Presented part of skeleton of *Dinornis struthioides* from New Zealand, 1887.

Child (COLES)

Presented Coal-plants from Rhymney, South Wales, 1871.

Chitty (*Hon.* EDWARD)

Presented Tertiary fossils from Jamaica, 1856.

Christy Trustees

Presented antler of elk from Cleveland, Yorkshire, 1889.

Clark (WILLIAM)

Dr. Clark, of Berea, Ohio, collected remains of fishes from the Cleveland Shale (Upper Devonian) of the district in which he resided. He sold several important specimens to the Museums of Columbia and Harvard Universities, and a few specimens of *Cladoselache* to the British Museum in 1896; but the greater part of his collection, upwards of 200 specimens, was purchased by the Trustees in 1900. It comprised numerous specimens of *Cladoselache* and various Arthrodira, besides one Palæoniscid, all described in papers by Prof. E. W. Clappole.

Clarke (*Sir* CASPAR PURDON)

Presented Palæozoic and Tertiary fossils from Australia and Tasmania, 1889.

Clarke (WILLIAM BRANWHITE)

Presented jaw of *Sthenurus minor* from river deposit, New South Wales, 1877.

Claussen (P.)

Dr. Claussen studied the geology of the province of Minas Geraes, Brazil, and explored some of the caverns, from which he obtained a collection of bones, chiefly mammalian, recorded by him in the *Bulletin* of the Royal Academy of Brussels (1841), and sold to the British Museum in two instalments in 1841 and 1844.

Claypole (EDWARD WALLER)

Presented specimens of *Palæospis americana* from the Upper Silurian of Pennsylvania, 1890; sold specimens of *Cladoselache* from U. Devonian, Ohio (W. Clark Coll.), 1896.

Clemenceau

Collected fossils from French Chalk, purchased 1900.

Cleminshaw (EDWARD)

Presented upper jaw of *Megalosaurus bucklandi* from the Inferior Oolite, Sherborne, 1883.

Clift (WILLIAM)

Presented mammalian bones discovered by Mr. Whidbey in Oreston cavern, 1822.

Clifton (GEORGE)

Presented a collection of British fossils, including fish-remains from the Portland Stone (*Caturus cliftoni*, &c.), 1889.

Cochrane (Sir ALEXANDER)

Obtained the fossil human skeleton from Guadaloupe, presented by the Lords of the Admiralty, 1813.

Collins (A. L.)

Presented Palæozoic Crinoidal limestone from Afghanistan, 1893.

Colvin (Col.)

Presented remains of ostrich, *Struthio asiaticus*, from Siwalik Formation, India, 1848.

Conry (THOMAS)

Presented eggs of turtles from a consolidated beach, Island of Ascension, 1812.

Cooke (JOHN HENRY)

For some years Mr. Cooke was a schoolmaster in Malta and investigated the geology of the Maltese Islands, publishing papers in the *Geological Magazine* (1891), the *Quarterly Journal* of the Geological Society (1893), and elsewhere. He presented 14 Pleistocene Mollusca and 44 Tertiary Echinoidea from Malta to the Museum in 1892. He also explored the Har Dalam Caverns, with the aid of a Government grant, and the first selection of 200 specimens from his collection of mammalian remains, described in the *Proceedings* of the Royal Society (1893), was presented to the Museum by the Council of

that Society in 1893. Other selections from the latter collection were presented to the Museums of Valetta, Bologna, and Edinburgh.

Cookson (GEORGE)

The Rev. G. Cookson, of Writhlington, made a collection of fossils from the Oolite below the Bradford Clay at Ancliffe (= Avon cliff), near Bradford, Wiltshire, about the year 1825. A list in his writing preserved in the Geological Department, mentions 163 specimens. Many of those were figured in the "Mineral Conchology" of J. Sowerby (*q.v.*) and 34 specimens have been identified in the Sowerby collection.

Coombe (G. AUGUSTUS)

Resident at Peppering, near Arundel, Coombe collected Tertiary and Cretaceous fossils in Sussex. He both lent and gave specimens to Mantell, and assisted Dixon in the preparation of his "Geology and Fossils . . . of Sussex" (1850). In 1888, 447 specimens from this collection, including some fine fish-remains from the Chalk, were presented to the British Museum by Mr. P. E. Coombe. None of the specimens bore labels.

Coombe (PERCY E.)

See COOMBE, G. AUGUSTUS.

Cooper (Sir DANIEL)

Presented marsupial remains from the river deposits of Queensland, 1861, 1864, 1866.

Cope (EDWARD DRINKER)

The collection of fossil Vertebrata made by Prof. Cope was acquired after his death by the American Museum of Natural History, New York. A plaster cast of the unique type-specimen of *Phenacodus primævus* contained in it, was purchased from him in 1889.

Coppinger (RICHARD WILLIAM)

Coppinger was surgeon on board H.M.S. *Discovery*, during the *Alert* and *Discovery* Arctic exploring expedition in 1875-76, under the command of Sir George S. Nares, to whose narrative of the voyage he contributed a Report on the Petermann Glacier. The fine series of fossils which he collected during the expedition, together with the specimens obtained by Captain Feilden, Lieut. Aldrich, Dr. Moss, and Mr. Hart, were described by Mr. R. Etheridge, Senior, in his paper on the "Palaeontology of the Coasts of the Arctic Lands visited by the late British Expeditions, etc." (*Quart. Journ. Geol. Soc.*, 1878). The collection, which includes the specimens figured by Mr. Etheridge, was presented to the Museum by the Lords of the Treasury in December, 1878.

Corner (FRANK)

Dr. Corner has collected extensively from the superficial deposits of the London district. In 1896 he presented to the Museum some non-marine Mollusca from these formations.

Cotta (C. BERNHARD VON) [1808-1879]

This eminent geologist, who from 1842 to 1874 was professor at Freiberg in Saxony, was initiated in the study of fossil botany by his father Forstmeister Heinrich Cotta, who had made a large collection of fossil woods and "Staarsteine" from the Permian rocks near Chemnitz

(*Psaronius*, *Tempuskya*, *Medullosa*, etc.). To their investigation young Cotta returned from his studies in Freiberg and Heidelberg, and thus was one of the earliest to use the microscope in determining the structure of fossil plants. His results were published in "Die Dendrolithen in Beziehung auf ihren inneren Bau" (1832). During a short visit to London, he made the acquaintance of the botanist Robert Brown, and, on his return to Saxony to assume the post of teacher at the forestry institute in Tharandt, became the intermediary between the British Museum and his father, with the result that, in 1839, half of the latter's collection, containing several of the figured specimens, was bought by the Trustees.

Cottle (JOSEPH) [1770-1853]

This well-known Bristol bookseller and poet, the friend of Wordsworth and Coleridge, explored the Oreston caverns near Plymouth in 1822-23, and published an account of his observations in an appendix to his work on "Malvern Hills" (1829). About sixty teeth and bones discovered by him were purchased by the British Museum in 1876, but the greater part of his collection is in the Bristol Museum.

Cowderoy (Miss) [-1852]

This lady lived in Portman Square, where she had gathered about 2000 fossils of both vertebrates and invertebrates, mainly from the Eocene and Oligocene beds of England and Nice, but also from the Jurassic and Cretaceous rocks of Britain. The collection was bequeathed by her to the Trustees.

Cracherode (CLAYTON MORDAUNT) [1730-1799]

Though ordained a minister of the Church of England, Cracherode devoted his time, talents, and ample fortune to the collection of books and rarities of art and nature, all which were bequeathed by him to the nation. The shells and minerals, though forming a relatively small part of the collection, were valued at £2000. They included one hundred fossil animals and six fossil plants, some of which had been obtained from Lord Bute's collection. Several can still be identified by bearing a small oblong ticket of white paper with truncate corners, on which is the catalogue number preceded by ZZ in the case of animals, and AAA in the case of plants. There are in the Mineral Department, two distinct MS. lists of this portion of the Cracherode collection (which used to be exhibited to the public with the Cracherodean minerals), and with one of them the numbers and signs correspond. These lists are of some interest as giving the names used by the older naturalists, e.g., "the *Anthropomorphus Dudleyensis* or Dudley fossil." Some specimens have been marked by a later hand with a pink disc bearing the name "Cracherode."

Cremorne (Lord)

Presented pair of antlers of Irish deer, 1791.

Croft (CHARLES)

In his younger days, the present editor of the *Keighley News* resided in Shropshire, and made a collection of Trilobites and other fossil invertebrates from the Cambrian, Ordovician, and Silurian rocks of the neighbourhood, especially a fine series from the Bala beds of Ty-Isaf. When Mr. Croft moved to Plymouth, he sold to the British Museum a selection from this collection, representing 572 species, mainly trilobites. These specimens, acquired in 1873, are neatly labelled in his own hand, on oblong tickets of bluish paper.

Crofton (ADDISON)

Presented Mollusca from the Carboniferous Limestone of Yorkshire, 1898.

Croizet (L'Abbé)

An inhabitant of the Auvergne, Croizet published observations on its geology. He collected a series of vertebrate fossils, chiefly Mammalia, from the Oligocene and Miocene freshwater deposits, and sold a selection to the British Museum in 1848. His collection also includes some antlers of reindeer from a rock-shelter at Neschers, a few cut by man, and one bearing the incised figure of a horse.

Cumberland (GEORGE) [1752-1848]

After passing through the course at the Royal Academy as an honorary student, Cumberland visited the art-treasures of Italy, and in 1792 settled in Bristol, where he studied the local geology and collected fossils, especially crinoids, sending his results to the Geological Society, which occasionally published them in its *Transactions* and always kept his donations. In 1826, Cumberland published his little "Reliquiæ Conservatæ" with admirable lithographs by himself and his wife. In it, under the name *Amphora*, he first described the genus now called *Amphoraocrinus*. A specimen of the "2nd species" of this, collected on the borders of Yorkshire and Lancashire, had been presented by him to the British Museum in 1825, as "a new variety of nave encrinite." The specimens of *Apiocrinus* figured in this book, with other fossils of his collection, were bought by J. Heywood, M.P., for the Manchester Geological Society in 1842, and were transferred to the Museum at the Owens College in 1864. Cumberland was the first to find *Marsupites* at Brighton, and figured some in his book. Subsequently he distributed privately, as an appendix to "Reliquiæ," various plates illustrating fossil crinoids. His collection as a whole was mentioned by the *West of England Journal* (1835) as the finest in Bristol, and fossil fishes from it were lent to Agassiz.

Cunningham (ROBERT O.)

Dr. Cunningham discovered the jaws of *Homalodontotherium cunninghami* in the Santa Cruz Beds of Patagonia, presented by the Lords of the Admiralty, 1874.

Cunnington (WILLIAM) [1813-]

As grandson on the mother's side, of William Cunnington, F.S.A., of Heytesbury, Wilts, an active geologist and a friend of Wm. Smith, Mr. Cunnington had early opportunities of seeing his collection of fossil sponges, and so, at the age of seven, began his own collection from the flint-heaps by the roadside, and a little later from the Chalk-pits of Upavon. Subsequently settled at Devizes, where he was honorary curator of the local museum from its commencement in 1853, he seized the numerous opportunities afforded by the construction of the railway there, as also at Farringdon, Swindon, Chippenham, and Trowbridge, to amass a remarkable collection and to become familiar with the geological details of the country (see *Quart. Journ. Geol. Soc.*, 1850, pp. 453 and 454). Mr. Cunnington also made purchases from Wm. Buy (*q.v.*), e.g., of a *Belemnoteuthis* described by Owen (*Phil. Trans.*, 1844) and by himself (*London Geol. Journ.*, 1847); from T. Berrett of Steeple Ashton, and (after the decease of Miss Benett [*q.v.*]), from J. Baker. Thus, before he left Wiltshire in 1874, his collection contained more than

20,000 specimens, and was the subject of frequent references in the *Wiltshire Archaeologist*, and in Murray's "Handbook of Wiltshire" (1859). So early as 1849 the Museum bought several British fossils from Mr. Cunnington. In 1859 he presented Cretaceous invertebrates, and in 1861 a further purchase was made from him. In 1865, at the special request of Murchison, he sold to the Museum of Practical Geology a fine series of Upper Greensand Sponges, many subsequently described by Dr. G. J. Hinde. In 1875, when the reduction of his collection was imperative, the British Museum had the first choice and purchased, in two instalments, several thousand specimens of Cretaceous and Jurassic fossils from Wiltshire. These included, among the Cephalopoda, many type-specimens of D. Sharpe (*Palæontogr. Soc.*, 1853-55); among Crustacea Decapoda numerous specimens figured by T. Bell (*Palæontogr. Soc.*, 1860); Cretaceous Brachiopoda figured by T. Davidson (*Palæontogr. Soc.*, 1852); and many of T. Wright's types of Cretaceous Echinoderma (*Palæontogr. Soc.*, 1862-67). There was also yet another fine series of sponges from the Upper Greensand of Warminster and the Lower Greensand of Farringdon (see Dr. Hinde's "Catalogue of Fossil Sponges in the British Museum," 1883). Mr. Cunnington has subsequently made isolated donations of valuable specimens, among them being blastoids and crinoids from Kentucky and Alabama, collected by his uncle, John Cunnington, resident for many years in the latter State. Mr. Cunnington's series of Wiltshire mammalian remains, as well as a few local specimens, were presented by him to the Devezes Museum. It is worth noting that he never came into possession of any of his grandfather's collection, all of whose fossils were purchased soon after his decease by Dr. C. H. Parry of Bath, while his collection of antiquities was bought by Sir R. C. Hoare, and is now in the museum at Devezes.

Cuvier (Baron GEORGES)

Presented mammalian remains and plaster casts of the same from the Gypsum Quarries near Paris, 1818, 1822.

Daintree (RICHARD)

Presented Marsupial remains from the river-deposits of Queensland, 1871. Collected Australian fossil Invertebrata, presented by his executor, 1879.

Daly (W. MAHON)

Presented Carboniferous Limestone from Siam, 1900.

Darwin (CHARLES)

Presented two South American fossil brachiopods, 1852, and some fossil Cirripedes, 1854.

Darbishire (ROBERT DUKINFIELD)

Mr. Darbishire, of Manchester, has studied and collected the marine shells from the Glacial Drift of central England. In 1889 he presented to the Museum his collection from the Drifts of Macclesfield, Blackpool, Garston, Worden Hall, and Kelsey Hill, altogether about 1400 specimens. The Macclesfield Collection was described by him in the *Memoirs of the Literary and Philosophical Society of Manchester* (1865), also tabulated in *Geol. Mag.*, vol. ii, p. 298.

Damon (ROBERT) [1814-1899]

This well-known Weymouth dealer in natural history specimens made a private collection of about 400 Dorsetshire fossils to illustrate his

"Geology of Weymouth and the Isle of Portland" (Ed. 2, 1884), in the Supplement to which nearly half of the specimens were figured. The collection was purchased by the British Museum from Mr. Damon's executor in 1890.

Davidson (THOMAS) [1817-1885]

Born at Muir House, Midlothian, Davidson spent much of his youth on the continent of Europe, in the study of both art and science. While in Rome, at the age of twenty, he was attracted by Leopold v. Buch to the study of the Brachiopoda, and to this group he devoted the rest of his life, gathering at his Brighton residence a large collection of both recent and fossil forms, and writing numerous papers, which were illustrated by his own crayon. His *magnum opus* was the "Monograph of British Fossil Brachiopoda" published by the Palæontographical Society (1850-1886), but he also wrote on the brachiopods of other countries from France to China, and published through the Linnean Society a monograph of Recent Brachiopoda. The first of many donations to the British Museum was made by him in 1848, and his entire collection of specimens, drawings, and illustrative books and pamphlets, bequeathed by him to the Trustees, was handed over by his son, Mr. Wm. Davidson, in 1886. It comprises 1796 named species and 22,831 specimens, which, by the direction of the testator, are kept apart in one series. To it, however, have in better accordance with the spirit of his will, been joined various specimens described by him and previously presented. The specimens are all accompanied by Davidson's own carefully-written MS. labels.

Davies (GRIFFITH)

Collected Ordovician Trilobites from North Wales, purchased 1871.

Davis (JAMES WILLIAM) [1846-1893]

Resident at Chevinedge, Halifax, Davis was much interested in fossil fishes and in the geology of Yorkshire, on which subjects he published several papers. His collection of fossils consisted chiefly of fish-remains from the Yorkshire Coal-Measures and the Dorsetshire Lower Lias, with a few others from Carboniferous, Rhaetic, Cretaceous, and Tertiary rocks. They included many specimens, especially those from the Coal-Measures and Lias, described in his own papers. A selection of 324 specimens from this collection was purchased by the Museum from his executor in 1895.

Dawkins (WILLIAM BOYD)

Collected and presented Mammalian remains from Windy Knoll and Creswell Caves, Derbyshire, 1885.

Dawson (CHARLES)

Mr. Dawson, residing formerly at Hastings, now at Uckfield, collected the remains of Dinosauria and other Reptilia from the Wealden near Hastings. His first collection was purchased by the Museum in 1884, and further small instalments were added in the years 1885, 1887, 1888, 1892, and 1894. The bones of *Iguanodon* are especially noteworthy, and include the type-specimens of *I. dawsoni*, *I. fittoni*, and *I. hollingtoniensis*, described by Mr. Lydekker in the *Geological Magazine* (1889).

Dawson (Sir JOHN WILLIAM)

This well-known Canadian geologist presented a few specimens illustrating his researches, namely, land-shells and small land-reptiles from

the Coal Measures of Nova Scotia in 1863, North American Devonian Plants in 1865, and some Canadian Cambro-Silurian Sponges in 1890.

Day (FRANK)

Obtained skull of *Toxodon platensis* from the Pampa of Buenos Ayres, purchased 1878.

Deane (JAMES)

Triassic footprints from Turner's Falls, Massachusetts, U.S.A., purchased 1844.

Debey (JULIEN)

Presented Miocene Mollusca from Java, 1891.

Dennant (J.)

Presented Tertiary Mollusca from Muddy Creek, Victoria, 1886.

Deshayes (GERARD PAUL) [1797-1875]

This eminent French naturalist resigned his medical practice, and, in the words of Lyell, "sacrificed his existence to make himself, for the benefit of science, the first fossil conchologist in Europe." He spent much of his time collecting fossils, especially from the Tertiary rocks of Europe, to assist those conchological and stratigraphical studies that brought him, through Sir Charles Lyell, into cordial relations with English naturalists. He wrote a "Catalogue of the Conchifera, or Bivalve Shells, in the Collection of the British Museum," 1853-1854; and during those years the Trustees purchased from him collections, chiefly of Mollusca, from the Eocene and Miocene of the Paris Basin and Bordeaux. The rapid progress subsequently made in the classification of those rocks soon rendered these series, with their insufficiently detailed labels, of less value than was expected. Deshayes' main collection is in the École des Mines, Paris.

Dewick (EDWARD S.)

Presented Pleistocene non-marine Mollusca from the Barnwell Gravels, Cambridge, 1889.

Dixon (FREDERIC) [1799-1849]

While practising as a physician at Worthing, Dixon made from the rocks of the neighbourhood a collection of fossils, which he worked out with peculiar skill. This was the basis of a work on "The Geology and Fossils of the Tertiary and Cretaceous formations of Sussex" in which he had the co-operation of the leading specialists in palæontology, and for the better illustration of which he borrowed specimens from other collectors, such as J. S. Bowerbank, F. E. Edwards, G. A. Coombe, Mrs. Smith of Tunbridge Wells, W. D. Saull, N. Wetherell, and others mentioned on p. 55 of his work. Specimens already in the British Museum were also figured therein. The volume should have been published in 1850, the date on the title-page, but its author died when it was only two-thirds printed. Finally, under the editorship of R. Owen, it was completed and published in 1852 (*vide* Woodward and Sherborn, "Brit. Foss. Vert.," p. 17). Dixon's collection, which was purchased from his executors in 1850, contained over 4000 fossils from the Tertiary beds of Bracklesham and Bognor and from the Chalk, besides other miscellaneous specimens. The figured specimens of Tertiary molluscs have been noted by Mr. R. B. Newton in his "Systematic List of the Edwards Collection"; the figured specimens from the Chalk bear the

numbers of plate and figure, which were pencilled on them when the work was published.

Dollin (Mrs. HARRIET)

A dealer of Lyme Regis from whom various Lower Lias fossils were purchased, including a unique specimen of dentition of *Prognathodus guentheri*, 1881.

Dowker (GEORGE) [1828-1899]

Mr. Dowker, resident near Wingham, Kent, published many observations on the geology of eastern Kent (*Proc. Geol. Assoc.* and elsewhere), and collected a large series of fossils from the Eocene and Cretaceous formations of that district. A selection of about 650 specimens from this collection was purchased by the Museum from Mr. Dowker's executor in 1899.

Draper (DAVID)

Presented remains of the *Glossopteris* Flora from South Africa, 1890, 1893, 1897.

Dubois (EUGENE)

Presented a plaster cast of the calvaria of *Pithecanthropus erectus* from Java, 1895.

Ducie (Earl of)

A donor of many valuable fossils, including *Solaster moretonis* from the Great Oolite in 1864, English Chalk fossils in 1881, *Phoderacanthus grandis* from the Carboniferous Limestone of Bristol in 1884, and supposed Reptilian eggs from the Great Oolite in 1891.

Durrant (M. B.)

Presented a tooth of *Iguanodon* in Wealden sandstone, 1825.

Earl (PERCY)

Bones of Dinornithidæ from New Zealand, purchased 1845.

Edwards (FREDERICK ERASMUS) [1799-1875]

As a member of the London Clay Club and a founder of the Palæontographical Society, Edwards devoted himself to the study of the British Eocene Mollusca. Beginning with the London Clay in 1835, he extended his researches over the Eocene strata of Sussex, Hampshire, and the Isle of Wight, where, assisted by Mr. H. Keeping, he made the most complete collection ever attempted by any geologist. He described his specimens in the *London Geological Journal* (1847), the *Geologist* (1860), the *Geological Magazine* (1865), and above all, in the Monographs of the Palæontographical Society (Vols. for 1848, 1852, 1854, 1855, 1858), the work being continued by S. V. Wood (Vols. for 1859, 1862, 1870, and 1877). The first connection of Edwards with the British Museum was the purchase of some Cetacean remains from the Suffolk Crag from him in 1851. In 1863 he presented remains of *Hyopotamus* from the Isle of Wight Oligocene. In 1867 there was purchased from him a large series of Tertiary plants and invertebrates from various British localities, including cirripedes, figured by Sowerby and Darwin, corals figured by Edwards and Haime (*Monogr. Palæont. Soc.*, 1850), *Serpula* figured by Sowerby, also Tertiary molluscs from Germany and the Vienna basin. The Mollusca from Vienna were named and labelled by Dr. Hoernes.

The bulk of his collection of British Eocene and Oligocene Mollusca, numbering 39,000 shells and containing the originals of his various publications, was purchased in 1872-1873, a second series of foreign specimens being bought through Mr. W. Kinsey in 1875. A systematic list of the British collection, by Mr. R. B. Newton, was published by the Trustees in 1891. All the Mollusca are still preserved on the original paper-covered tablets, labelled in Edwards' own hand.

Egerton (*Sir PHILIP MALPAS DE GREY*) [1806-1881]

Sir Philip Egerton, tenth Baronet, an elected Trustee of the British Museum, studied geology under Conybeare and Buckland, and after graduating at Oxford travelled abroad with his college friend, Lord Cole (afterwards Earl of Enniskillen). He began scientific work with his companion by exploring some of the caverns of Franconia, where the joint researches resulted in a large collection of remains of the Cave Bear and other Pleistocene Mammalia. Journeying to Neuchatel about 1830, Egerton and Lord Cole became acquainted with Louis Agassiz, who aroused their interest in fossil fishes and induced them to become life-long collectors of these fossils. They decided to form two distinct cabinets, but to share acquisitions and the counterpart-halves of unique or valuable specimens. Their early collections were largely used by Agassiz when preparing his "Recherches sur les Poissons fossiles" (1838-44), and they contain a large proportion of his type-specimens, besides other specimens labelled and noticed by him. In later years, Egerton himself also described many of his own fossils. The whole of the collection, including the cave bones and miscellaneous fossil Invertebrata, in addition to the fossil fishes, was purchased from the executors of the late Sir Philip Egerton in 1882.

Ellis (*FREDERICK*)

Collected fossils from the Rhætic of Aust Cliff, a selection purchased 1896.

Else (*WILLIAM*)

Collected Mammalian remains from the Bench Cavern, Brixham, near Torquay, a selection purchased 1889.

Elter (*CHARLES*)

Presented skull of *Rhinoceros antiquitatis* from Siberia, 1813.

Elwes (*J. W.*)

Presented fossils from the London Clay of Fareham, 1890.

Enniskillen (*WILLIAM WILLOUGHBY, Third Earl of*) [1807-1886]

Lord Enniskillen (at first Lord Cole) collected in association with Sir Philip Egerton (*q.v.*), and his complete collection was purchased in two instalments in 1882 and 1883. In addition to the fossil fishes and Franconian cave bones, this collection included several valuable fossil Vertebrata, notably a skeleton of *Cervus giganteus* from Ireland, and the type-specimen of *Plesiosaurus macrocephalus* from the Lower Lias of Lyme Regis.

Enys (*JOHN DAVIES*)

Obtained for the Museum a collection of bones of birds from the Chatham Islands, purchased 1898.

Etheridge (ROBERT)

Before the former assistant-keeper of the Geological Department entered Government service as palæontologist to the Geological Survey, he lived at Bristol and here made a collection of fossils from the Silurian, Devonian, Carboniferous, and Jurassic rocks of the neighbourhood, with a few from elsewhere. On coming to London in 1869, Mr. Etheridge sold the whole series of 2342 specimens to the British Museum. They were marked in ink with letters referring to localities and horizons, as explained in a MS. list accompanying the collection.

Ettingshausen (CONSTANTIN FREIHERR VON) [1826-1897]

After being for a few years attached to the Geologische Reichsanstalt at Vienna, Baron von Ettingshausen became, in 1854, Professor at the Medical and Surgical Military Academy in that city, and in 1871 went to Graz as Professor of Botany. He was exceedingly active in collecting, and was accustomed to bring home great masses of matrix to be split by the winter frosts. Thus he was able to supply valuable collections to many museums, especially the Geologische Reichsanstalt and Naturhistorisches Hofmuseum in Vienna, the Landesmuseum of Steiermark, the University of Graz, and the British Museum. The last-mentioned made extensive purchases from him between the years 1878-1882, during which years he spent much time in London arranging and examining portions of the National Collections, the results of his study being printed by the Royal, Geological, and Palæontographical Societies, and in other British publications. The material bought from von Ettingshausen represented, often by some of the original figured specimens, the Tertiary floras of Styria (notably that of Parschlug), Bohemia, Carniola, and the Tyrol, the Triassic floras of Lunz in Austria and Raibl in Carinthia, and the Liassic of Fünfkirchen in Hungary; it included important series from the Palæozoic rocks of Bohemia, Moravia, and Styria, the Tertiary of Alum Bay, and various other specimens. Most of the specimens bear a number on a white label 1 cm. square, also a similar label in one of several colours indicating the supposed habitat of the plant when living; some are provided with the name and locality on a lithographed label in Ettingshausen's own hand; but the majority are without such labels. A list of Ettingshausen's writings, in many of which these specimens were referred to, was published by R. Hoernes (*Mitth. naturwiss. Ver. Steiermark*, xxxiv., p. 77; 1898).

Evans (CALEB) [1831-1886]

While employed in the Chancery Pay Office and residing at Hampstead, Evans in 1855 took up the study of geology, and collected fossils from the excavations for new sewers in London, and in the railway cuttings close at hand, supplementing this work by vacation studies at the seaside. Thus he accumulated a large collection, some type-specimens from which were bequeathed by him to the Geological Society. A selection from the remainder of his collection was, after his death, bought from Mr. E. Westlake. It comprised 2172 specimens from Neocomian, and 1556 from Tertiary rocks, the large majority being invertebrates. Most of Evans' papers were published by the Geologists' Association, the most notable being "On some Sections of Chalk between Croydon and Oxted, with Observations on the Classification of the Chalk."

Evans (Sir JOHN)

Presented a Mammalian tooth (*Bolodon*) from the Wealden of Hastings, 1893.

Evans (WILLIAM)

Presented Tertiary fossils from the Murray River, South Australia, 1887.

Everett (A. H.)

Presented Mammalian remains from Sarawak, Borneo, in 1890, and Tertiary limestones from Borneo in 1894.

Ewen (C. A.)

Excavated a nearly complete skeleton of *Dinornis maximus* in New Zealand, purchased 1896.

Ewen (PHILIP)

Collected Lower Silurian Graptolites from Victoria, purchased 1879.

Exton (HUGH)

Presented fossil Fishes from the Stormberg Beds of South Africa, namely, *Semionotus capensis* in 1883, and *Cleithrolepis extoni* in 1888; also a unique specimen of *Procolophon trigoniceps* from the Karoo Formation in 1892.

Falconer (HUGH) [1808-1865]

To our knowledge of the fossil Mammalia, Falconer published important contributions, which were collected in his "Palæontological Memoirs," edited by Charles Murchison in 1868. In 1830 to 1855 he was on Government service in India, and co-operated with Col. Cautley (*q.v.*) and others in collecting and describing the fossil mammals of that country. In 1842, when he came to England on sick leave, he brought with him valuable collections, most of which he presented to the India House and to the British Museum, devoting much time to their study and arrangement in the latter institution. He also placed a few specimens in the museum of the Geological Society. On his final return to Europe, after his retirement, he travelled much in pursuit of his researches, and amassed a small collection of mammalian remains, which was presented to the British Museum in 1867 by his executor, Mr. Charles Falconer. This collection included a few Indian fossils, and a large series of remains of Hippopotamus from caverns near Palermo, Sicily.

Feilden (HENRY WEMYSS) [1838-]

Col. Feilden was naturalist to the *Alert* and *Discovery* Arctic exploring expedition in 1875-6 under Sir George Nares, to whose narrative of the voyage he contributed Appendices relating to ethnology, Mammalia, ornithology, and, with C. E. de Rance, an appendix "On the Geological Structure of the Coasts of Grinnell Land and Hall Basin," as well as a separate paper on the "Geology of the Coasts of the Arctic Lands visited by the Expedition" (*Quart. Journ. Geol. Soc.*, 1878). The Palæozoic fossils collected during the expedition were described by Mr. R. Etheridge, Senior (*tom. cit.*), while the fossils of Miocene age, collected by Messrs. Feilden and Moss (a surgeon to the expedition) from Discovery Bay, were sent to Prof. O. Heer of Zurich for determination. Mr. Etheridge says: "The series collected by Captain Feilden are all so carefully noted, labelled, and localised, that their history is complete and satisfactory." The collection was presented to the Museum by the Lords of the Treasury in December, 1878.

Fenn (JOSEPH H.)

Collected vertebrate remains from superficial deposits of Madagascar, purchased 1893.

Ferguson (G. E.)

Obtained *Arthropycus* from Gold Coast Colony, presented by Prof. J. W. Judd, 1893.

Finch (JOHN)

Finch was a professional geologist, a member of the Philosophical Society of Birmingham, and an authority on the Tertiary deposits of the United States. In 1834 he sold to the Trustees his collection of American fossils, comprising 400 specimens from Tertiary strata, representing over 150 species, 100 specimens from the Upper Secondary, and 100 from Transition beds. The Tertiary series contained most of the types and figured specimens of T. Say's "Account of some of the Fossil Shells of Maryland" (*Journ. Acad. Nat. Sci., Philadelphia*, iv., p. 124; 1824). The specimens were unfortunately without labels, so that only 21 (about half) of those figured can now be identified (see R. B. Newton, *Geol. Mag.*, dec. iv., vol. ix., p. 303; 1902); many of these bear, written in ink, either "N. Amer." or the specific name. Finch also presented to the Museum a plaster cast of a trilobite on January 9th, 1836.

Fitzgerald (R. D.)

Presented remains of *Miolania* from Lord Howe's Island, 1885.

Fontana (LUIS J.)

Presented Mammalian remains from the Pampa of Buenos Ayres, 1871-72.

Foord (ARTHUR HUMPHREYS)

Collected and presented Cephalopoda from the Carboniferous Limestone of Ireland, 1893.

Forbes (HENRY OGG)

Collected remains of Dinornithidæ from New Zealand, purchased 1893. Presented bones of *Harpagornis moorei* from New Zealand, 1894.

Ford (J. B.)

Presented Coal-plants from Cape Breton, Nova Scotia, 1835.

Fox (F. G. BROOK)

Presented fossils from the Salt Range, India, 1896.

Fox (HOWARD)

Presented Invertebrate fossils and Radiolarian Chert from Culm Measures of North Cornwall, 1895; specimens of *Pteroconus mirus* from Lower Devonian, Bedruthan, Cornwall, 1900.

Fox (J. H. & Co.)

Bones of Mammalia and *Aepyornis* from Madagascar, purchased 1894.

Fox (Rev. WILLIAM DARWIN) [-1882]

Fox collected reptilian remains, chiefly of Dinosauria, from the Wealden cliffs of the Isle of Wight in the neighbourhood of Brixton, where he lived. The collection of about 500 specimens included the

types of *Hypsilophodon foxi*, Huxley; *Polacanthus foxi*, Hulke; *Ornithopsis hulkei*, Seeley; *Aristosuchus pusillus*, Seeley; and *Hylæochampsa vectiana*, Owen. The important series of remains of *Hypsilophodon* was catalogued in a MS. volume by J. W. Hulke, and used in his description of this dinosaur (*Phil. Trans.*, 1882). The whole collection was purchased from the executors of Fox in 1882. Fox had previously presented the right mandibular ramus of *Choeropotamus cuvieri*, Owen (1841), which he found in the Eocene of the Isle of Wight.

Franks (GODFREY FIRTH)

Presented fossil Corals from Barbados, 1891.

Fraser (CHARLES)

Presented Indian fossil Mammalia, 1847-48.

Fritsch (ANTON)

Pleistocene non-marine Mollusca, Trilobites from the Barrande Collection, and Cretaceous Teleostean Fishes from Bohemia, were purchased respectively in 1892, 1897, 1899.

Fulljames (Capt. G.)

Presented type-skull of *Mastodon perimensis* from the Pliocene of Perim Island, 1847.

Fulton (HUGH)

Tertiary Mollusca from Florida, purchased 1899.

Gamble (W.)

Mr. Gamble has collected Polyzoa from the Chalk in the neighbourhood of Rochester, Kent, especially at a locality near Chatham, described by him in G. R. Vine's "Report on Cretaceous Polyzoa" (*Rep. Brit. Assoc.*, 1892). Two collections of about 165 and 629 specimens respectively were purchased from him in 1893 and 1898, and described in Dr. Gregory's "Catalogue of Cretaceous Bryozoa in the British Museum."

Gardner (JOHN STARKIE)

While occupied with researches in the Gault and associated deposits at Folkestone, Mr. Gardner obtained the services of the local collector, John Griffith, to make a unique collection of fossils from these strata. This collection, comprising the type-specimen of *Mauisaurus gardneri*, Seeley, as well as many fossils described by Mr. Gardner himself, was purchased by the Museum in five instalments in 1876, 1880, 1884, 1885 and 1886. Other researches on the Eocene Flora, published by the Palæontographical Society and elsewhere, led Mr. Gardner to make large collections of plant-remains from Alum Bay, Bournemouth, Studland, and continental localities. These he sold to the Museum in 1880, 1881, 1884 and 1886. Under the auspices of the Royal Society and British Association, Mr. Gardner also collected Tertiary plants in Mull and the North of Ireland, and these were received by the British Museum in 1886.

Gavey (GEORGE EDWARD)

Devonian fossils from Belgium and British fossils, purchased respectively in 1880 and 1890.

Geddes (PATRICK)

Presented Pleistocene Mammalian remains from San Angelo, Mexico, 1880.

Geils (J. M.)

Presented remains of *Elephas armeniacus* from Armenia, 1856.

Gerrard (EDWARD)

Numerous fossil Vertebrata have been purchased from this well-known dealer, including a carapace of *Ilophorus ornatus* and a skeleton of *Myiodon robustus* from the Pampa of Buenos Ayres in 1883 and 1885, remains of *Aphanapteryx* from the Chatham Islands in 1893, and Madagascar fossils in 1894.

Gibraltar (Governor of).

Presented Mammalian remains collected by Capt. Fox Brome from the caverns of Gibraltar, 1876.

Gibson (JOHN)

Presented Mammalian remains from the Kirkdale Cavern, 1823-24.

Gilbertson (WILLIAM)

In the second volume of his "Illustrations of the Geology of Yorkshire," 1836, Professor John Phillips writes as follows: "My greatest obligation is to Mr. Gilbertson of Preston, a naturalist of high acquirements, who has for many years explored with exceeding diligence and acumen a region of mountain limestone remarkably rich in organic remains. The collection which he has amassed from the small district of Bolland is at this moment unrivalled, and he has done for me, without solicitation, what is seldom granted to the most urgent entreaty; he has sent me for deliberate examination, at convenient intervals, THE WHOLE OF HIS MAGNIFICENT COLLECTION, accompanied by remarks dictated by long experience and a sound judgment. He had proposed to publish an account of his discoveries, and especially of the Crinoidea for which no man in Europe had equal materials, and had made a great number of careful drawings for the purpose; but all these, as well as the specimens, he placed at my disposal—a striking proof of liberal and genuine devotion to science. An attentive examination of this rich collection rendered it unnecessary to study minutely the less extensive series preserved in other cabinets."

"Most of the figures of fossils are taken from specimens in Mr. Gilbertson's collection, because these were generally the best that could be found." Gilbertson was a pharmaceutical chemist and obtained his specimens largely by purchase, thus acquiring the collection of Dr. Alexander Moore of Preston, which included many specimens figured in Sowerby's "Mineral Conchology." He presented a few crinoids to the Geological Society in 1826 and in 1841, but in the latter year the rest of his collection was purchased by the Trustees. It consisted of 2646 specimens, thus distributed: Corals, 103; Echinoderms, 613; Bivalves, 1041; Univalves, 810; Crustacea, etc., 79. In addition to the specimens from Bolland are some from the Coal Measures of Lancashire. As the collection was purchased by Dr. J. E. Gray and was for many years retained in the Zoological Department, most of the specimens bear the circular register ticket of that department, replacing Gilbertson's original numbers. Labels in faded brown ink in the hand-writing of Phillips, and signed ϕ , are occasionally preserved. The collection was accompanied by a detailed MS. list, which denoted by "P." the specimens figured by Phillips, as mentioned above; by "Z. J.," the blastoids figured by G. B. Sowerby in the *Zoological Journal*; by "S." or "Sow," specimens

figured by J. Sowerby in the "Mineral Conchology"; and by "G. M.," numerous specimens figured in his own manuscript, which unfortunately has disappeared.

Gillett (ALFRED)

Presented a skeleton of *Ichthyosaurus tenuirostris* from the Lower Lias of Street, 1884.

Gipps (W. L. R.)

Presented Marsupial remains from the river deposits of New South Wales, 1875.

Godwin-Austen (Col. H. H.)

Presented Palæozoic fossils from Kashmir, 1888, and Lower Pliocene Mollusca from N. Italy, 1896.

Goldenberg (FRIEDRICH) [1799-1881]

Goldenberg studied the Lower Permian flora and fauna of Rhenish Prussia, and made a collection of fossils in illustration of his work. From this collection 155 specimens, chiefly animal remains from the neighbourhood of Saarbrücken, were purchased by the British Museum from Professor Schenk in 1890. The selection included 8 specimens figured in Goldenberg's "Fauna Sarapontana Fossilis" (1875-77).

Gollmer (C. H. V.)

Collected Cretaceous Invertebrata in the Lebanon, purchased 1896.

Goodchild (JOHN GEORGE)

Presented Tertiary shells from Bordighera, 1882.

Goodwin (FRANK S.)

Presented antlers of *Cervus elaphus* from tufa at Alport, Derbyshire, 1891.

Gordon (Rev. GEORGE)

Presented skeleton of *Hyperodapedon gordonii* from Trias of Elgin, 1886.

Gordon (JOHN)

Presented fossil Fishes from Lignite of Taubaté, San Paulo, Brazil, 1900.

Gostling (ARCHIBALD C.)

Presented skull of *Balana australis* from river deposit at Villa Constitucion, Argentine Republic, 1898.

Gowreeshankar (Diwán WAJESHANKAR)

Presented Pliocene teeth of *Mastodon* from Perim Island, 1885.

Grant (Col. CHARLES COOTE)

Collected and presented Ordovician and Silurian fossils from Ontario, Canada, 1899, 1900.

Grant (E. M.)

Bones of *Elephas* from the Pleistocene of Belgrade, purchased 1881.

Gray (JOHN)

As an iron-master, John Gray of Hagley, near Stourbridge, owned quarries in the Wenlock Limestone at Dudley, whence the stone was extracted for use as a flux. His workmen saved the fossils for him and he purchased others from elsewhere, and thus thrice amassed a splendid collection. His first was one of those to which Murchison acknowledges his indebtedness in the "Silurian System." In 1861, it contained 2730 specimens, and of these the Museum purchased 2366. The rest, it is said in the documents referring to the transaction, were destined for the Museum of Practical Geology; but just a year later he sold to the Museum a series of trilobites from the Wenlock Shale of Malvern. The first series comprised: 103 trilobites, including many figured by Salter (*Mem. Geol. Surv.* and *Palæontogr. Soc.*), the type of *Lichas grayi* and other *Lichas* figured by Fletcher; 241 echinoderms, including types of *Lepidaster grayi*, *Pseudocrinus magnificus*, and presumably *Pisocrinus pilula*, also specimens of *Pseudocrinus bifasciatus* and *Apiocystis pentremoides* figured by Forbes; 199 corals, including the type of *Heliolites grayi*; 1823 shells of molluscs and brachiopods, including specimens of *Leptaena* and *Siphonotreta* figured by Davidson; and the types of *Chiton grayanus* and *C. wrightianus*, the latter subsequently referred to *Turrilepas*. A selection from Gray's second collection was bought in two instalments in 1869, and amounted to 775 Wenlock fossils from Dudley, all classes of invertebrates being represented. On Gray's death his whole collection was taken over by the dealer, F. H. Butler, and from him in 1889 the Trustees purchased 337 selected specimens of invertebrates from the Wenlock beds of Dudley and of plants from the Coal Measures. A few other interesting specimens that came to light later on were also purchased. The remainder were dispersed by Mr. Butler in the course of business, and some of these also have ultimately found their way to the Museum, in the Madeley and other collections. Specimens from the Gray collection are readily recognised from being fixed with chalk and gum on a thin wooden tablet covered with a smooth purplish-brown paper, and provided with a label written on white paper.

Green (Rev. CHARLES)

Green, of Bacton, Norfolk, collected fossils, chiefly Vertebrata, from the Forest Bed and the Fens. Many of his specimens were described in Owen's "British Fossil Mammals and Birds." His collection was purchased by the Museum in 1843.

Green (JACOB)

Presented plaster casts of North American Trilobites, 1834.

Green (UPFIELD)

Presented Devonian Invertebrata from the Eifel, 1899.

Greenhill (J. E.)

Collected and presented non-marine Mollusca from river-deposits at Clapton, Essex, 1888, and Mammalian remains from a Turbary at Walthamstow, 1890.

Greenough (GEORGE BELLAS)

Presented Tertiary shells from Barbados, 1822.

Greenwood (GEORGE)

Presented jaws of cave-bear from cavern at Isturitz, Bayonne, 1898.

Greenwell (Canon WILLIAM)

Presented Mammalian remains from Heathery Burn Cave, Durham, 1892.

Gregory (JOHN WALTER)

While assistant in the Department of Geology, Dr. Gregory, now Professor of Geology at Melbourne, made an important collection of fossils in Spitzbergen in 1896, and a large collection of Tertiary and Pleistocene fossils, including bones and teeth of the rodent *Amblyrhiza* in the West Indies in 1899. These collections were received as donations in the years mentioned.

Grenfell (J. G.)

While a master at Clifton College, Mr. Grenfell collected the crinoids of the Carboniferous Limestone in the Gorge of the Avon, as well as many from Clitheroe and the neighbourhood of Preston, Lancashire, and published a valuable paper on them in 1876 (*Proc. Bristol Nat. Soc.* I.). His collection of 61 specimens, purchased by the Trustees in 1891, contained the types of *Rhodocrinus verisimilis* and *Gilbertocrinus konincki*, with figured examples of *Poteriocrinus plicatus* and *Rhodocrinus verus*. The specimens were numbered in correspondence with a MS. note-book, presented with the collection; but some of the specimens therein mentioned were not received. The collection had been examined by Major Austin, who agreed with Mr. Grenfell's determinations.

Grey (Sir GEORGE)

Presented fossil Reptiles from the Karoo Formation of South Africa, 1859.

Grigson (W. H.)

Presented Tertiary fossils from Gippsland, Victoria, 1882.

Grose-Smith (HENLEY)

Shells and other remains of *Testudo grandidieri* from caverns of Madagascar, purchased 1892.

Guenther (ROBERT THEODORE)

Mr. Guenther, of Magdalen College, Oxford, visited northern Persia in 1898, and collected a few mammalian bones from the Lower Pliocene of Maragha, besides 145 invertebrate fossils, chiefly Miocene, from the neighbourhood of Lake Urmi. The collection was described by Dr. J. W. Gregory, Mr. R. B. Newton, and others, in Mr. Guenther's paper "Contributions to the Natural History of Lake Urmi" (*Journ. Linn. Soc. [Zool.]* 1899), and presented to the Museum by the collector in 1900.

Gunn (JOHN)

Presented a Paramoudra from the Chalk of Norfolk, 1827.

Guppy (H. B.)

Presented Post-Tertiary shells from the Solomon Isles, 1887.

Guppy (ROBERT JOHN LECHMERE)

Collected Tertiary Foraminifera from Trinidad, purchased 1892.

Häberlein (KARL)

Häberlein was a medical practitioner in Pappenheim, Bavaria, where are great quarries in the Lithographic Stone (Lower Kimmeridgian). In

consideration of professional services rendered to the quarrymen and their families, he was able to amass a valuable collection, comprising the original specimen of *Archæopteryx macrura* described by Owen (*Phil. Trans.*, 1863) and 1703 other fossils—namely, 23 reptiles, 294 fishes, 1119 invertebrates, 145 plants, and 122 miscellaneous. The whole collection was purchased by the British Museum in two instalments in 1862-63, the total sum paid to Häberlein being £700.

Haden (SIR FRANCIS SEYMOUR)

Presented a head of *Ichthyosaurus platyodon* and other reptiles and fishes from the Lower Lias of Lyme Regis, 1882.

Haggard (LIEUT., R.N.)

Presented eggs of turtles from a consolidated beach in the Island of Ascension, 1880.

Haldon (LORD)

Presented Mammalian remains and implements from Kent's Cavern, Torquay, 1883.

Hall (EDGAR)

Collected remains of *Glossopteris* Flora from New South Wales, presented by Mr. W. H. Shrubsole, 1892.

Hall (TOWNSHEND MONCKTON) [1845-1899]

Residing at Pilton, near Barnstaple, Hall devoted himself to the geology of North Devon, contributing papers to the *Transactions* of the Devonshire Association and the *Geological* and *Mineralogical Magazines*. Many of his specimens were figured in T. Davidson's Monograph of Devonian Brachiopoda; and his collection formed the basis of a valuable paper "On the Relative Distribution of Fossils throughout the North Devon Series" (*Quart. Journ. Geol. Soc.* xxiii. Proc. p. 371; 1867). A selected series of 237 fossils, including plants, fishes, and all classes of invertebrates, was bought from him in 1886.

Hamilton (A.)

Skeleton of *Aptornis defossor* from New Zealand, purchased 1893.

Hamling (JOSEPH G.)

Collected and presented Trilobites from the Culm Measures near Barnstaple, 1896.

Hanbury (DANIEL)

Presented Devonian Brachiopoda from China, and Mammalian remains from Chinese caverns, 1853.

Hantken (MAX VON)

Presented fossil Foraminifera from Hungary, 1888.

Hardman (EDWARD T.)

Collected and presented fossils from Western Australia, 1887.

Harford (FREDERICK)

For many years, Harford relieved the tedium of a city life by the preparation of Chalk fossils. His specimens were collected chiefly by Joseph Wood in the neighbourhood of Cuxton and Burham, Kent, but scarcely any of them bore a record of the locality whence they were

obtained. His collection was mentioned in Dixon's "Geology of Sussex" (1850). Besides the beautifully-prepared Chalk fossils, especially fishes, Harford accumulated a few specimens from other formations, some of them valuable. The greater part of the collection, numbering 1108 specimens, was purchased from him in 1888. In the same year he presented to the Museum the type-specimen of *Thrissops portlandicus*, A. S. Woodw., from the Portland Stone; and in 1889 he handed over to the Trustees the residue of his collection as a donation, to be used partly for distribution as duplicates to other museums.

Harlan (RICHARD)

Presented plaster casts of North American Trilobites, 1834.

Harmsworth (ALFRED)

Presented duplicates from a collection of Jurassic fossils from Franz Josef Land, 1899.

Harris (GEORGE FREDERICK)

Collected and presented Oligocene and Miocene Mollusca from Bordeaux, 1894.

Harris (WILLIAM) [1797-1877]

Harris collected fossils in the Chalk pits near Charing, Kent, especially from a detritus of Danian ag. He lent and presented specimens to several palæontologists engaged in research, notably Toulmin Smith, W. C. Williamson, and Prof. T. Rupert Jones. A selection of about 240 specimens from the collection left at his death was purchased by the Museum from his daughter in 1881. It comprised Ichthyosaurian remains figured in Dixon's "Geology of Sussex," various fish-remains, Brachiopoda described by Davidson, and Foraminifera and Entomostraca described by Prof. Rupert Jones.

Harrison (JAMES)

Collected fossils from the Lower Lias of Lyme Regis and Charmouth and prepared the skeleton of *Scelidosaurus harrisoni*, purchased 1861, 1865.

Harrison & Hodgson (Messrs.)

Presented Mammalian remains from a submerged forest at Jarrow, Newcastle-on-Tyne, 1857.

Hartmann (C. H.)

Presented Marsupial remains from river deposits of Queensland, 1884.

Hastings (BARBARA, *Marchioness of*) [1810-1858]

Barbara, Baroness Grey de Ruthyn, married (1) the second Marquis of Hastings (d. 1844); and (2) Commodore Hastings (afterwards Admiral Sir Hastings) R. Yelverton, G.C.B. (d. 1878). With the aid of Mr. Henry Keeping, she collected fossil Vertebrata, chiefly Mammalia, from the Eocene and Oligocene of Hordwell (Hampshire) and the Isle of Wight. She also acquired specimens for comparison from Montmartre, Allier, and the Mayence Basin. The collection included several specimens described by Owen, and many unique fossils described by later authors. The greater part of it was purchased by the Museum from the Marchioness in 1855, and a few additional specimens were purchased at her sale at Stevens' rooms in the same year.

Hatch (FREDERICK HENRY)

Presented remains of the *Glossopteris* Flora from the Transvaal, 1893.

Haughton (THOMAS JAMES)

Presented Palaeoniscid fishes from the Karoo Formation of South Africa, 1897.

Hauxwell

Collected Tertiary shells from valley of the Amazon, purchased 1870.

Hawkins (PERCY)

Presented *Archonodon jukesi* from Upper Old Red Sandstone of Llanvaches, Monmouthshire, 1895.

Hawkins (SAMUEL JAMES)

Hawkins collected and prepared a fine series of fossils, especially fish-remains and two Pterosaurian bones, from the Chalk of Blue-bell Hill, Burham, Kent. He presented the collection of about 515 specimens to the British Museum in 1891.

Hawkins (THOMAS) [1810-1889]

From the Lower Lias of Somersetshire and Dorsetshire, Hawkins, of Glastonbury, collected skeletons of Ichthyosaurs and Plesiosaurs "which his anatomical skill, and untiring perseverance and patience, enabled him to dissect from the rock, in a state of integrity previously thought unattainable." His more important specimens figured in his curious works, "Memoirs on Ichthyosauri" (1834), and "The Book of the Great Sea-Dragons" (1840), were purchased by the British Museum in 1834, on the valuation of Dean Buckland and G. A. Mantell, the latter of whom remarks that "They had been obtained with so much labour and expense, and were so admirably put together, and chiselled out with so much skill, that the sum awarded for them was scarcely sufficient" (*London Geol. Journ.*, p. 16; 1846). A subsequent collection of equal importance was purchased in 1840. He presented other portions of his collection to the Universities of Oxford and Cambridge.

Hector (Sir JAMES)

Presented Cretaceous and Tertiary fossils from New Zealand, 1875, and collected other similar specimens, purchased 1880.

Heggerty

Mammalian remains from Kent's Cavern, purchased 1843.

Hicks (HENRY)

Collected and presented Arenig fossils from Pembrokeshire in 1865, various Welsh Cambrian and Silurian fossils in 1884, and Mammalian remains from caverns in the Vale of Clwyd, 1885.

Hills (R. C.)

Presented Tertiary insects and plants from Wyoming and Colorado, U.S.A., 1891.

Hinde (GEORGE JENNINGS)

Presented Conodonts from the Sub-Carboniferous of Ohio, 1878; Invertebrate fossils and Radiolarian Chert from the Culm Measures of N. Cornwall, 1895.

Hinton (HENRY ARTHUR)

Presented Cretaceous Polyzoa, 1897.

Hitchcock (EDWARD)

Presented Triassic footprints from Connecticut, 1862.

Hoffert (H. H.)

Presented Palæozoic fossils from the Falkland Islands, 1891.

Holl (HARVEY BUCHANAN) [1820-1886]

A pupil in field geology of Sir H. de la Beche and Rogers of Pennsylvania, Holl retired to Malvern in 1862 and carried out valuable studies on the geology of the Malvern Hills (*Quart. Journ. Geol. Soc.*, 1864-65). He also published papers on the Inferior Oolite in the middle and south of England (*op. cit.*, 1863), and on the older rocks of south Devon and east Cornwall (*op. cit.*, 1869). He wrote several papers on fossil sponges and Entomostraca, the latter in conjunction with T. Rupert Jones (1865-69). Holl's collection, purchased from his executor, W. H. Holl, Esq., Q.C., consisted of 414 slides of Foraminifera and Ostracoda, the latter including the specimens figured by Jones and Holl, and 1205 invertebrate fossils from various British formations, especially those discussed in the above-mentioned papers. Among them were a figured specimen of *Homalonotus johannis*, and types of Mesozoic corals figured by P. Martin Duncan, viz., *Cyclolites beani*, *Montlivaltia holti*, *M. painswicki*, and *Septastrea haimeii* (Palæontogr. Soc.).

Hollis (THOMAS)

Presented Tertiary shells from Sicily, 1763.

Holm (GERHARD)

Prepared specimens of *Eurypterus* from the Upper Silurian of Oesel, purchased 1898.

Holroyd (WILLIAM FIRTH)

Presented English Lower Carboniferous Invertebrata, 1897.

Holst (P. A.)

Remains of *Cervus giganteus* from Russia, purchased 1883.

Home (Sir EVERARD)

Presented vertebral column of *Ichthyosaurus* from the Lower Lias of Lyme Regis, 1819.

Homersham (COLETTE)

Presented rocks and fossils from a deep boring at Richmond, Surrey, 1887.

Homfray (DAVID) [1822-1893]

By profession a lawyer, resident at Portmadoc in North Wales, Homfray spent his leisure in searching for fossils in the Palæozoic rocks of the neighbourhood, where he discovered many new forms, especially in the Tremadoc beds. He also worked the Menevian strata of Maentwrog and St. Davids with equal success. He was most generous in giving away even his finest specimens, and among other Museums that chiefly benefited by his labours were the Woodwardian at Cambridge, and the Manchester Museum. The latter contains several of his trilobites and a

Ctenodonta, described by Hicks and by Salter. Homfray's first donation to the British Museum consisted of 20 Tremadoc fossils, mostly trilobites, in 1867; while in 1882 he presented 379 fine fossils from the lower Palaeozoic rocks of Wales.

Hood (T. H. COCKBURN)

Presented Plesiosaurian remains from New Zealand, 1861, 1863; a footprint of *Dinornis* in modern beach-sandstone from New Zealand, 1872.

Hooker (Sir JOSEPH DALTON)

Presented Cretaceous fossils collected by Capt. Mansell in the Lebanon, 1863.

Horne (WILLIAM)

While in business in Leyburn, Mr. Horne made a large collection of Elasmobranch teeth from the Yoredale Rocks of Wensleydale, Yorkshire. The greater part of it, including the type and other specimens described by J. W. Davis, was purchased by the late Mr. William Reed for the York Museum. A valuable second selection from this collection, however, was purchased by the Trustees of the British Museum in 1885.

Horner (A. C.)

Presented *Thecospondylus horneri* from the Wealden of Tunbridge Wells, 1882.

Hoser (JULIUS)

Skeletons of *Neusticosaurus pusillus* from Upper Trias of Würtemberg, purchased 1881.

Hoskold (H. D.)

Presented specimens of the *Glossopteris* Flora from Argentina, 1890.

Housman (HENRY)

Presented footprints of *Rhynchosaurus* from Trias of South Staffordshire, 1862.

Houzeau de Lehaie (A.)

Presented Upper Cretaceous and Eocene fish-teeth from Belgium, 1889.

Howarth (OSBERT HENRY)

Presented a slab of shell-marble from La Luz, New Mexico, 1892.

Hughes (Mrs. MCKENNY)

Collected and presented non-marine Mollusca from Barnwell gravels, Cambridge, 1888.

Hulke (JOHN WHITAKER) [1830-1895]

This eminent oculist pursued researches among Mesozoic Reptilia, especially Dinosauria, Ichthyosauria, and Crocodilia. He described several specimens discovered by Mr. Mansel-Pleydell and Rev. W. Fox, and he himself made a collection of Dinosaurian remains from the Wealden of the Isle of Wight. This collection of nearly 400 specimens, including the type-specimen of *Iguanodon seelyi* and figured specimens of *Hypsilophodon foxi*, was presented to the British Museum with other miscellaneous fossils by Mrs. Hulke in 1895.

Hunter (ROBERT) [1823-1897]

As missionary at Nagpur, central India, from 1847 to 1855, Hunter pursued geological researches in that region with Rev. Stephen Hislop. He collected fossils in both the Nagpur district and other parts of India, and his whole collection, of about 1700 specimens, was received by the British Museum as a bequest in 1897.

India, Geological Survey of

Presented fossil Corals from Sind, 1881.

India, Secretary of State for

Presented Mammalia and Reptilia from the Siwalik Formation of India, 1860.

Inglefield (Admiral Sir EDWARD AUGUSTUS) [1820-1894]

In 1852, Inglefield undertook a voyage to the Arctic in the *Isabel*, in search of Sir John Franklin, and in the following year published an account of the expedition, with remarks on the physical geography, geology, etc., of Davis Straits, and its east and west shores, by P. C. Sutherland, surgeon to the expedition. His collection of fossils was transferred from the Museum of Practical Geology in 1878.

Inglis (DAVID)

Presented skull of *Bos primigenius* from Athol, Perthshire, 1817.

Inwards (RICHARD)

Presented Palæozoic fossils from Bolivia, 1830.

Jack (ROBERT LOGAN)

Presented fossil Invertebrata from Australia, 1879.

Jackson (FREDERICK)

Presented duplicates from a collection of Jurassic fossils from Franz Josef Land, 1899.

Jackson (J. E.)

Presented *Pentacrinus fossilis* and Carboniferous Crinoids, 1887.

Jardin des Plantes, Paris

Presented fossils from the Gypsum Quarries near Paris, 1818.

Jayakar (Lieut.-Col. A. S. G.)

Presented Eocene Mollusca from Oman, Arabia, 1900.

Jennings (W. F.)

Collected English Mesozoic Invertebrata, presented by Miss Ethel A. Thomas, 1892.

Jesson (THOMAS)

Mr. Jesson began his collection at Cambridge, when he obtained a fine series of fossils from the Cambridge Greensand, including some unique bones of birds described by Prof. Seeley (*Quart. Journ. Geol. Soc.*, 1876), and a few small Chelonian skulls described by Mr. Lydekker (*loc. cit.*, 1889). At the same time he collected from the Red Chalk of Hunstanton. Subsequently removing to the neighbourhood of Northampton, Mr. Jesson devoted attention to the Great Oolite of that district and the Oxford Clay

of St. Ives. Some Teleosaurian remains from the Great Oolite were purchased from him by the British Museum in 1888, but the greater part of his collection from that formation was acquired by the Northampton Museum. Selections of 1730 fossils from the Red Chalk, including Polyzoa described by G. R. Vine, 1010 fossils from the Oxford Clay of St. Ives, and 2709 fossils from the Cambridge Greensand were purchased from him by the British Museum in 1891, 1892, and 1894 respectively.

Jeunnet

Collected Australian Palæozoic Brachiopoda, presented by Lord Stanley, 1846.

Jex

A collector for the dealer R. Damon and his successor, R. F. Damon. Obtained Scottish Old Red Sandstone and Carboniferous Fishes purchased at various times from Damon. Also collected fish-remains from the Devonian of Canada, purchased from Damon, 1888 and 1892, and Mammalia from the Santa Cruz beds of Patagonia, purchased from Damon, 1899.

Johnson (HENRY) [1823-1885]

In the exercise of his profession as a civil and mining engineer in the Midlands, H. Johnson of Dudley had many opportunities for collecting fine specimens of fossils. These "he cherished with personal care and skilful manipulation, exhibiting their parts and characters clearly and with judgment, so that the palæontologist visiting his wonderfully rich collection, not only saw specimens better than he had seen before, but always found a judicious selection of doubtful or unknown forms... separated for examination by the specialist" (*Geol. Mag.*, 1885, p. 432). On Johnson's death, 2524 selected fossils from his collection were purchased through the dealer, R. Damon. Of these 1551 were from the Wenlock Beds, and consisted of 28 sponges, 466 corals, 211 echinoderms, 192 arthropods, 25 annelids, 136 polyzoans, and 493 molluscs; 973 were from the Carboniferous rocks of the neighbourhood, and of them 759 were plants, 79 arthropods, 105 molluscs, and 30 the remains of fishes. The best known of these choice specimens is the type of *Eucladia johnsoni*, H. Woodward.

Johnson (JAMES R.) [-1845]

In medical practice at Hot Wells, Bristol, Johnson was a wealthy collector of fine fossils. His collection is mentioned in the *West of England Journal* (1835) as "particularly distinguished by the truly gigantic Ichthyosaurian remains which it contains." It was visited by Agassiz when he came to England to study fossil fishes. At Johnson's death, his collection was sold at Stevens', and, as the Austins say, "the treasures which it had taken a long life to accumulate were dispersed throughout the civilised world." A catalogue of the sale is in the library of the Geological Department. The British Museum then obtained a number of specimens of varied nature, including several Mesozoic fishes and some remains of Crinoidea, a few of the latter figured by T. and T. Austin (*q.v.*), notably the wonderful group from the Upper Lias of Bridport, described by them under the name of *Pentacrinus johnsoni*.

Johnson (JAMES YATE)

Presented Tertiary Mollusca from Madeira, 1857.

Jones (THOMAS RUPERT)

In the course of his researches on fossil Foraminifera and Entomostraca, Prof. Rupert Jones collected important series of specimens, purchased from him in 1869, 1880, 1882, 1888, 1891, 1892, and 1899.

Jones (W. WEAVER)

A resident of Cleobury Mortimer, Weaver Jones collected teeth and spines of Elasmobranch Fishes from the Carboniferous Limestone of Oretton, and a few remains of *Bothriolepis*, &c., from the Upper Old Red Sandstone of Farlow, Shropshire. Some of the fish-teeth were figured by Morris and Roberts (*Quart. Journ. Geol. Soc.*, 1862). The collection of 140 specimens was purchased by the Museum from Mr. Jones' executor in 1880.

Jordan (SWINFEN)

Presented Carboniferous Corals from Clifton, 1876.

Judd (JOHN WESLEY)

Presented fossils from borings in the London Basin, 1885; Ostracoda from the Bracklesham Beds, 1888; and *Arthropycus* from Gold Coast Colony, 1893.

Jukes-Browne (ALFRED JOHN)

Presented Tertiary and Post-Tertiary fossils from Barbados, 1890 and 1892; Miocene Mollusca and Corals from Antigua, 1894.

Kapff

Collected Reptilia from the Trias of Württemberg, purchased 1864.

Kaup (JOHANN JACOB) [1803-1873]

Dr. Kaup was Inspector of the Grand-Ducal Cabinet of Natural History at Darmstadt, from 1840 until 1873, and devoted special attention to the fossil Mammalia discovered in the Miocene deposits of Hesse-Darmstadt. He made a private collection of these fossils and sold it in instalments to the British Museum in the years 1837, 1845, 1846, and 1847. He finally sold the unique skull of *Dinotherium giganteum*, described by himself and A. v. Klipstein, and other important associated mammalian fossils, to Dr. Thomas Oldham, who allowed the British Museum to purchase them in 1867. Many of the specimens acquired by the Museum are described in Kaup's "Ossements Fossiles" (1832-41) and in other memoirs by him.

Keeping (HENRY)

A well-known collector from whom were purchased Middle Eocene Mollusca from Stubbington, Hampshire, 1858; Pleistocene Mammalian remains from Barrington, Cambridge, 1885; and Tremadoc fossils from Shineton, Shropshire, 1889. Also collected Oligocene fossils from the Isle of Wight, presented by the Council of the Royal Society, 1887, and assisted in making the collections of F. E. EDWARDS and the MARCHIONESS OF HASTINGS (*q.v.*).

Kellett (Capt.)

Presented Pleistocene Mammalia from Kotzebue Sound, Alaska, 1850.

Kemper (S.)

Presented Palæoniscid fishes from the Karoo Formation of South Africa, 1897.

Ker (G. C. E.)

Molar of *Mastodon angustidens* from the Red Crag of Foxall, Suffolk, purchased 1888.

Ketley (CHARLES)

Living at Smethwick, near Birmingham, Ketley utilised the opportunities afforded to him as a civil and mining engineer, of collecting specimens from the Wenlock Beds and Coal Measures of Dudley, Malvern Tunnel, and the district. The Museum made small purchases from him in 1866, 1869, 1870, 1873, 1874, and among these a series of the rare cystid *Placocystis*, and another of the coral *Goniophyllum*, are noticeable. Specimens from his collection are in many other museums, e.g. the Woodwardian at Cambridge; but on his death his main collection was acquired by the Mason College, now Birmingham University, a few remaining in the possession of his son, Mr. C. B. Ketley. One of the latter, figured by Bather (1891) as *Thenarocrinus callipygus*, ultimately reached the Museum in the collection of Mr. W. Madeley.

Kidston (ROBERT)

Collected Coal-plants from the Radstock and Forest of Dean Coalfields, presented by the Council of the Royal Society, 1885, 1887.

Kimbley (HUGH)

Presented Devonian Pentremites from Kentucky, 1890.

King (WILLIAM)

Presented *Syringosphæra* from the Karakoram, Kashmir, 1890.

Kirkby (J. W.)

Collected Palæozoic Ostracoda, purchased 1888.

Klipstein (AUGUSTUS VON) [1801-1894]

Appointed Professor of Mineralogy at Giessen in 1836, Klipstein at once entered into correspondence with the British Museum, but it was not until he had published his "Beiträge zur geologischen Kenntniss der Ostlichen Alpen" (1843) that the bargaining began seriously. At last, in 1851, the Trustees bought from him a collection of 6147 specimens, mostly from the St. Cassian beds, and including all those specimens in his own possession that were figured in the above work. Most classes of Invertebrata were represented, as well as the reptilian fragments described by H. v. Meyer in the same book, and a few fish-remains. The collection further comprised specimens from other Triassic beds and other localities of the Tyrol, e.g. Muschelkalk, Wengener Schichten, and Raibler Schichten, also Cretaceous corals from Gosau, and Tertiary fossils from Brandenberger Thal, N. Tyrol. The collection was divided into 1030 lots, numbered consecutively, and each with one or more labels in Klipstein's handwriting, usually on pink paper. Not merely is this the chief collection of Keuper fossils in the Museum, but its value to the student may be judged from Zittel's statement that Klipstein increased the St. Cassian fauna by more than 300 species, "deren Begründung und Beschreibung freilich manches zu wünschen lässt." Other series of Klipstein's collecting are to be seen at Budapest and elsewhere, but that in the British Museum is the one by which his work must be interpreted.

Knight (THOMAS A.)

Presented Silurian Trilobites, 1826.

Koch (ALBERT C.)

About 1840 Koch brought a large collection of remains of *Mastodon americanus* from Missouri and exhibited them to the public at Exeter Change in London. This collection was described by Koch himself in a small pamphlet entitled, "Description of the Missourium" (Louisville, 1841) and it was reported on by R. Owen (*Proc. Geol. Soc.*, 1842). It was ultimately purchased by the British Museum in 1844, and many of the separate bones were used in the reconstructed skeleton now placed at the entrance to the gallery of Fossil Mammalia.

Kochibe (T.)

Presented Radiolarian Chert from Japan, 1898.

Koninck (LAURENT GUILLAUME DE) [1809-1887]

Though Professor of Chemistry at Liège, de Koninck's title to fame rests on his "Description des Animaux Fossiles qui se trouvent dans le Terrain Carbonifère de Belgique" (1842-51), and subsequent works of similar nature. In 1853, on coming to London to receive the Wollaston Fund of the Geological Society, he sold to the British Museum a collection of Belgian fossils, representing 500 species from the Carboniferous, 125 from the Devonian, and 250 from the Tertiary rocks, in all some 3000 specimens. These were accompanied by loose labels in de Koninck's small angular hand on oblong bits of white paper.

Krantz (A. AND F.)

Numerous purchases have been made, especially of Continental fossils, from these dealers. They include pigmy elephants from the caverns of Sicily, 1897.

Kusta (J.)

Collected fossils from the Lower Permian Gas-coal of Bohemia, including a fossil scorpion (*Cyclophthalmus*) purchased from him, 1895.

Laffan (GEORGE BASTABLE)

Presented antler of Reindeer and skull of Bison from Thames deposits of Twickenham, 1894.

Lakin (MICHAEL H.)

Presented skeleton of *Ichthyosaurus platyodon* from Lower Lias of Stockton, Warwickshire, 1898.

Lambert (C. J.)

Presented Tertiary shells and fish-teeth from Coquimbo, Chili, 1878.

Lankester (EDWIN RAY)

Presented a unique specimen of *Pteraspis crouchi*, showing scales, from the Lower Old Red Sandstone of Worcestershire, 1873.

Last (J. T.)

Mr. Last has collected zoological specimens in Madagascar for the Hon. Walter Rothschild. In 1894 he found some fossil bones in the marsh deposits of the island, and sent them to the British Museum, which purchased some of them directly from him, others through Mr. E. Gerrard. Among the remains was the original skull of *Megaladapis madagascariensis*, Forsyth Major.

Lastic (ST. VAL, *Vicomte de*)

In 1863, the Vicomte de Lastic made a scientific exploration of the cavern of Bruniquel on his estate in Tarn-et-Garonne, and obtained a large collection of remains of reindeer and other mammals associated with bones and implements of man. In 1864, Owen, having first taken care to visit the cavern with the Vicomte, purchased his collection for the British Museum, and subsequently described the human remains and the jaws of horses (*Phil. Trans.*, 1869). The human bones and remains of associated animals, with a few implements, are preserved in the Department of Geology; but the principal objects of human workmanship are in the Department of British and Mediæval Antiquities at Bloomsbury.

Laur (*Mrs.* AGNES)

Collected Polyzoa and other fossils from the Chalk of Rügen, purchased 1899.

Layton (JAMES)

The Rev. James Layton was for some years Curate of Catfield, Norfolk, and made a valuable collection of the larger Mammalia from the Forest Bed, which was purchased by the Museum in 1858. Some of his observations were published in the *Edinburgh Journal of Science* (vol. vi.).

Leach (R. E.)

Presented bivalves from the Norwich Crag, 1888.

Leathes (G. R.)

Presented shells from the Crag of Suffolk and Norfolk, 1824.

Lee (JOHN EDWARD) [1808–1887]

Born at Hull, Lee early made the acquaintance of Prof. John Phillips—then at York—and was by him led to the study of geology. During travels, on account of his health, through Scandinavia, Russia, and other parts of Europe, and later, when settled first at Monmouth and finally at Villa Syracusa, Torquay, he amassed a very large collection of fossils, which he presented to the British Museum in 1885. A "Rough Catalogue" of it, printed for private circulation in 1880, gave the number of specimens as 21,854, representing over 9750 species. Some of the specimens were collected by himself, others were bought from dealers, but to nearly all are attached labels in his own handwriting. The collection includes many type and figured specimens of plants and invertebrates. Among them may be specially mentioned the types of various sponges from the Yorkshire Chalk, described by Lee in 1839 (*Mag. Nat. Hist.*); a considerable number of brachiopods, mostly Devonian, figured in Phillips' "Palæozoic Fossils of Devon and Cornwall" (1841), and by Davidson (*Palæontogr. Soc.*); types of *Euomphalus serpens* and *Goniatites excavatus* figured by Phillips (*op. cit.*); *Goniatites multilobatus*, Beyr., figured by F. Roemer (*Geol. Mag.*, 1880); the trilobites *Ilænus murchisoni* and *Homalonotus johannis*, figured by Salter (*Palæontogr. Soc.*, 1865–67); the unique specimen of *Tricoelocrinus leei*, Whidborne (1889). Lee published a few papers, reference to which and to other fossils in his collection will be found in his "Notebook of an Amateur Geologist," 1881.

Leeds (ALFRED NICHOLSON)

For about thirty years Mr. Leeds, of Eyebury, Peterborough, has, with great skill, collected the remains of reptiles and fishes from the

Oxford Clay near Peterborough. His first collection, made in association with his brother, Mr. Charles E. Leeds, was purchased from him by the Museum in four instalments in 1890, 1891, 1892 and 1893. Several subsequent small purchases have added important specimens to the series, notably a nearly complete Plesiosaurian skeleton in 1897, and the tail and two limbs of a gigantic Dinosaur in 1899. This collection comprises many type and unique specimens of Dinosauria, Crocodilia, Plesiosauria, Ichthyosauria, and fishes, described by J. Phillips, J. W. Hulke, H. G. Seeley, R. Lydekker, C. W. Andrews, and A. S. Woodward.

Leeds (CHARLES E.)

See LEEDS, ALFRED NICHOLSON.

Lees (Sir CHARLES CAMERON)

Presented bones of Dodo from Mauritius, 1892.

Leeson (JOHN RUDD)

Dr. Leeson, with Mr. G. B. Laffan, has investigated the Thames deposits at Twickenham (see *Quart. Journ. Geol. Soc.*, 1894). He presented to the British Museum the fossils there found, namely, a unique frontlet of *Saiga tatarica* in 1891, remains of Reindeer and Bison in 1894, and a skull of *Bos primigenius* with Mollusca in 1896.

Leidy (JOSEPH)

Presented a skull of *Oreodon culbertsoni* from the White River Formation of Dakota, 1890.

Leifchild (Mrs.)

Presented miscellaneous British fossils, 1890.

Lepsius (RICHARD)

Plaster cast of restored skeleton of *Halitherium schinzi* from Lower Miocene, Hesse Darmstadt, purchased 1884.

Lessly (ANDREW)

Presented silicified wood from Antigua, 1763.

Lettsom (W. G.)

Presented Tertiary shells from South America, 1860.

Lewis (E. R.)

The late Professor in the Syrian Protestant College, Beyrout, made a large collection of the various organisms found in the Upper Cretaceous of the Lebanon. He specially collected the fishes, and described his work in the *Geological Magazine*, dec. 2, vol. v. (1878), pp. 214-220. His collection was acquired by the dealer, R. Damon, of Weymouth, from whom the Trustees of the British Museum purchased a first selection in 1878, 1883, and 1884. A selection was subsequently purchased by the Edinburgh Museum of Science and Art. The whole collection of fish-remains was described by J. W. Davis (*Trans. Roy. Dublin Soc.*, ser. 2, vol. iii., 1887). The British Museum possesses the specimens on which H. Woodward founded the species *Squilla lewisi* and *Limulus syriacus* (*Quart. Journ. Geol. Soc.*, 1879).

Lewis (T. T.)

Mr. Lewis, of Aymestry, assisted Murchison in investigating the Upper Silurian of the district in which he resided, and made a large

collection of the local fossils (see Geikie, "Life of Murchison," i., p. 242; 1875). Most of these specimens were given to Murchison or sent abroad; but a small remnant of the collection, including some Mollusca named and partly described by J. W. Salter, was purchased by the British Museum from Mr. T. Bryan Ward, of Aymestry, in 1898.

Lhotzky (JOHN)

In 1837 this gentleman presented 18 specimens of fossil invertebrates (Brachiopoda, etc.), collected by himself from the Palæozoic rocks of Tasmania. "Labels in red ink, attached to several specimens, relate to my day-book." He also presented some specimens to the Geological Society.

Lightbody (ROBERT) [-1874]

Mr. Lightbody resided at Ludlow and collected Lower Palæozoic fossils. On his death in 1874, he bequeathed his collection in three parts to the British Museum, the Ludlow Museum, and the Manchester Museum. The British Museum received the type-specimen of a Cambrian Trilobite, *Erinnys ramulosa*, from St. Davids; an undescribed star-fish from the Upper Ludlow of Leintwardine; and about 70 fish-remains from the Upper Silurian and Lower Old Red Sandstone, including several specimens of *Pteraspis* and *Cephalaspis*, described by Prof. Ray Lankester in his "Cephalaspidæ" (Palæontogr. Soc., 1868-70). All the specimens were well labelled by Lightbody himself.

Lindström (GUSTAF)

Collected Silurian Invertebrata from Gotland, purchased 1866.

Liversidge (ARCHIBALD)

Presented Palæozoic fossils from New South Wales, 1880.

Loftus (W. K.)

Presented Cretaceous and Tertiary fossils from Persia, 1853.

Logan (Sir WILLIAM EDMOND)

Presented *Eozoon canadense*, 1864.

Lowndes (Miss)

Collected and presented fossils from the Gault of Okeford Fitzpaine, Dorset, 1896; described by Mr. R. B. Newton, *Proc. Dorset Nat. Field Club*, vol. xviii., 1897.

Lubbock (Sir JOHN)

See AVEBURY, BARON.

Lucy (W. C.)

Collected English Jurassic and Cretaceous fossils, presented by Mr. Edward Power, 1895.

Luxmoore (E. BOUVERIE)

Explored the caverns of the Vale of Clwyd with Dr. Henry Hicks, and presented the resulting collection in 1885. Also presented Devonian Corals and Stromatoporoids from Torquay, 1883; Trilobites from the Penrhyn Slate Quarries, 1888; and Nummulites from Mentone, 1889.

Lyell (*Sir* CHARLES)

During his foreign travels, when occupied with geological researches, Sir Charles Lyell made several small collections. In 1844, accompanied by Sir J. William Dawson, he collected a series of Carboniferous Invertebrata, which were studied by de Verneuil and enumerated, with his memoranda, in Lyell's "Travels in North America," 1845. This collection was presented to the Museum of Practical Geology, whence it was transferred to the British Museum in 1880. Fossil Invertebrata from the Canaries were presented by him to this Museum in 1856 and 1860, from Madeira in 1857. The type-specimen of *Cephalaspis lyelli* and bones of *Trogotherium* described in Owen's "British Fossil Mammals," were also among Sir Charles Lyell's donations, which began in 1829.

MacCullough (D. M.)

Collected and presented Pteraspidian fishes from the Lower Old Red Sandstone of Herefordshire and Monmouthshire, 1883.

MacDonald (ROBERT)

Collected and presented Pleistocene Mammalian remains from the Porcupine River, Canada, 1873.

MacLeod (*Sir* NORMAN)

Presented Old Red Sandstone Fishes from Scotland, 1847.

McCormick (ROBERT) [1800-1890]

In his capacity as naval surgeon, McCormick was sent three times to the West Indies, while in 1827 he went with Parry to the Arctic, and in 1839 with Ross to the Antarctic Regions. In 1852 he again visited the Arctic Regions, leading a boat expedition up the Wellington Channel. He bequeathed to the nation 250 fossils, chiefly Brachiopoda, collected by him in the Arctic Regions, Madeira, Tasmania, the Falkland Isles, and Kerguelen Island, and occasionally referred to in his book, "Voyages of Discovery in the Arctic and Antarctic Seas and round the World" (1854).

McEnery (JOHN) [17 -1841]

For many years Chaplain, at Tor Abbey, McEnery devoted his leisure to the exploration of the caverns near Torquay. While collecting the mammalian remains, between 1825 and 1829, he accumulated many notes and drawings, which he would have published had his appeal for subscriptions been responded to. These remained unpublished until 1859, when Mr. Edward Vivian edited the MSS. and used the prepared plates of illustrations in a posthumous work, "Cavern Researches." On the death of McEnery, his collections and MSS. were dispersed by auction, and a large series of the specimens from Kent's Cavern was purchased by the Trustees of the British Museum in 1842. Some of McEnery's figured specimens are in this collection, others in that of the Geological Society, and a few in the Torquay Museum. The collection of J. E. Lee (*q.v.*) contained 106 "original specimens of McEnery from Kent's Cavern, bought at Newton."

McMurtrie (JAMES)

Alderman McMurtrie, of Radstock, manager of the Somerset estates of Lord Carlingford, devoted about thirty years to the collection of fossil plants from the Somersetshire Coal Measures. His valuable collection was studied and partly described by Mr. R. Kidston, and the greater part

of it, comprising 263 specimens, was presented to the Museum by Mr. McMurtrie in 1894.

MacPherson (WILLIAM)

Collected and presented fossils from the English Chalk, 1899, 1900.

Madeley (WILLIAM)

For many years secretary to the Dudley and Midland Geological Society, Mr. Madeley, who formerly lived in Dudley, was in a good position to acquire choice specimens, of which he always carefully noted the locality and precise horizon. His collection included a metatype of *Botryocrinus pinnulatus*, originally in the J. Gray collection, and a co-type of *Thenarocrinus callipygus*. He also purchased a metatype of the latter species from the Ketley collection. On moving to his present residence in Stourbridge, Mr. Madeley sold a number of his specimens to the dealer, R. Damon. In 1894 the Museum received, as an exchange, 80 of those specimens, consisting of Wenlock corals and Polyzoa, while, in the following year, it purchased the remainder, namely, 33 Cystidea, including a valuable series of *Placocystis*, and 55 Crinoidea, including the figured specimens.

Major (CHARLES IMMANUEL FORSYTH)

In the course of his researches on extinct Mammalia, Dr. Major has made several important collections, among which may be mentioned those of Lower Pliocene Mammalia from the Island of Samos and from Olivola (N. Italy), Miocene Mammalia and Birds from France, small Pleistocene bones from the caves of Sardinia and Corsica, and remains of Mammalia and Birds from the surface deposits of Madagascar. One part of the Samos Collection was purchased from Dr. Major by the British Museum in two instalments in 1889 and 1890; while the other part was purchased by Mr. Barbey of Geneva. The Olivola Collection was purchased by the Museum in two instalments in 1895 and 1897. French, Corsican, and Sardinian fossils were purchased by the Museum in 1893, 1894, and 1900. Madagascar fossils, including important remains of Aepyornithes, obtained with the aid of a government grant, were presented to the Museum by the Council of the Royal Society in 1898. A reconstructed skeleton of *Hippopotamus madagascariensis*, from Madagascar, was purchased by the Museum from Dr. Major in 1900. Many of these specimens have been described by Dr. Major himself in various British and foreign publications.

Mansel-Pleydell (JOHN CLAVELL) [1817-1902]

Mansel, who assumed the name Mansel-Pleydell in 1870, was a landowner in Dorsetshire, who devoted much attention to the geology and natural history of that county. He collected the local fossils and presented them as he acquired them, partly to the British Museum, partly to the Dorset County Museum. His earliest donations to the British Museum, beginning in 1862, were reptilian remains from the Kimmeridge Clay, nearly all of importance, and described by J. W. Hulke and R. Owen. One of his latest donations, received in 1889, was a tooth of *Elephas meridionalis*, discovered by himself, with other remains of the same animal, in a fissure in the Chalk at Dewlish, Dorset (see O. Fisher, *Quart. Journ. Geol. Soc.*, 1888). He also presented in 1897 fish-remains figured by Egerton (1869), and, in 1884, the types of two Oolitic corals, *Dimorphoseris oolitica* and *Thamnastræa manseli* of Duncan.

Mantell (GIDEON ALGERNON) [1790-1852]

For several years a medical practitioner at Lewes, Sussex, Mantell collected fossils from the local chalk-pits. His geological researches also extended to the sandstones and clays of the Sussex Weald, in which he was the first discoverer of Dinosauria, Crocodilia, fishes, and plants. He published "The Fossils of the South Downs" (1822), besides more popular works, among which "Petrifactions and their Teachings; or, a Handbook to the Gallery of Organic Remains in the British Museum" is of particular interest to a student of the Museum's history. In 1835 he removed to Brighton, and his collection, containing more than 20,000 specimens, was there arranged for public exhibition by the Sussex Scientific Institution as the Mantellian Museum, with G. F. Richardson as curator, in the hopes that it would form the basis of a County Museum. Each specimen bore a small yellow oval label numbered in ink to correspond with a MS. Catalogue prepared by himself. In 1817, he presented to the British Museum a few specimens to illustrate his forthcoming first work; and, in 1825, he added a tooth of the newly-discovered *Iguanodon*. In 1839, disappointed that the municipality of Brighton would not acquire his collection, he sold the whole of it to the British Museum at a considerable loss. It was especially valuable as containing not only the Wealden Reptilia, the Maidstone Greensand *Iguanodon*, and other fossils described in detail by Mantell himself, but also Chalk and Wealden Fishes described by Agassiz in his "Recherches sur les Poissons Fossiles"; it also included various specimens bought at the sale of James Parkinson's collection (*q.v.*), but not all of these can now be identified. In later years, when settled in Chester Square, Pimlico, Dr. Mantell continued to collect Dinosaurian remains from the Weald, and other fossils. After his death a selection from this second collection, comprising 100 vertebrate remains and over 1000 invertebrates, was purchased by the British Museum in 1853.

Mantell (*The Hon.* WALTER BALDOCK DURRANT) [1820-1895]

The eldest son of Dr. G. A. Mantell left England about 1840 for New Zealand, where he ultimately held important public positions. He was one of the earliest and most systematic collectors of bird-bones from the superficial deposits of that country. He also discovered the nearly-extinct *Notornis mantelli*, of which his original specimens are in the Department of Zoology. A few bones of Dinornithidæ sent by him to Dr. G. A. Mantell, and described by the latter (*Quart. Journ. Geol. Soc.*, 1848), were purchased by the Museum in 1848. A large collection, obtained by Mantell chiefly from the old cooking-places of the Maories, was purchased in 1856.

Marsh (OTHNIEL CHARLES)

Presented casts of several remarkable American fossil Vertebrata described in his works, including *Eosaurus acadianus* (1862), Cretaceous toothed Birds (1881), *Rhamphorhynchus phyllurus* (1883), Dinocerata (1885), a skeleton of *Dinoceras mirabile* (1888), and a skull and mandible of *Brontops robustus* (1889). He also presented a specimen of the Trilobite, *Triarthrus becki*, with appendages, in 1894, and *Brachiospongia* from the Ordovician of Kentucky, in 1895.

Marsham-Townsend (*Hon.* ROBERT)

Presented a valuable collection of British fossils and some Cretaceous Fishes from Brazil, 1877.

Martin (HANDEL T.)

Collected fossils from the Chalk of Kansas, including *Uintacrinus* and the wing-bones of *Pteranodon*, purchased in 1895 and 1900.

Martin (WILLIAM) [1767-1810]

The son of a hosier of Marsfield, Nottinghamshire, Martin spent his childhood on the provincial stage. But in his twelfth year, taking drawing-lessons from James Bolton of Halifax, he also imbibed from him a taste for natural history. He earned his living as a drawing-master, first at Burton-on-Trent, then at Buxton, and at Macclesfield from 1805 to his death. He collected fossils in the neighbourhood and wrote various papers on them. His best-known work is "Petrificata Derbiensia" (1809). Many of the specimens figured in this book were handed by his widow to James Sowerby, who refigured them in his "Mineral Conchology," and thus they came with the Sowerby Collection to the British Museum. It is not known where the other originals of "Petrificata Derbiensia" now are; but in 1833 some were in the small but good collection of Martin's coadjutor, White Watson, F.L.S., of Bakewell (see *Mag. Nat. Hist.* vi., p. 130). The Department possesses a representation of the "Strata in Beverley Liberty, Yorkshire," inlaid in local rocks, "By W. Watson."

Martin (W. J.)

Presented the type-specimen of *Lepidotus fittoni* from the Wealden of Sussex, 1846.

Martinetti (A.)

Collected Pliocene Mollusca from Monte Mario, Rome, purchased 1894.

Masing (KARL)

Presented tooth of *Elasmotherium* from Russia, 1893.

Mathieu (M.)

Collected Miocene shells and corals from Touraine, purchased 1847.

Matthew (G. F.)

Presented *Eocystis primævus* from Lower Cambrian, New Brunswick, 1900.

Maunsell (*Ven. Archdeacon*)

Presented a skeleton of the Irish Deer, 1843.

Maw (GEORGE)

Presented a skull of *Loxomma allmanni* from the Coal Measures of Coalbrookdale, 1884, and some Silurian Brachiopoda, 1885.

Mawson (JOSEPH)

While occupied with the construction of railways in Bahia, Brazil, Mr. Mawson has made a valuable collection of Cretaceous Reptilia, Pisces, and Mollusca from that region. It has been presented by him to the Museum in several small instalments from 1881 onwards, and comprises the type-specimens of *Lepidotus mawsoni*, *Megalurus mawsoni*, and *Acrodus nitidus*, besides the first evidence of Pterosauria from Brazil, described by Dr. A. S. Woodward (*Ann. Mag. Nat. Hist.*, 1898-1902). There are also remains of Pleistocene *Mastodon* and *Megatherium* in the collection.

Metcalf (ARTHUR T.)

Presented an upper jaw of young *Elephas* from Creswell Caves, 1885.

Metropolitan Board of Works

Presented Mammalian bones from excavations for the Thames Embankment, Westminster, 1875.

Meyer (C. J. A.)

Presented Pleistocene non-marine Mollusca from Blackfriars Road, 1890; Cretaceous Polyzoa, 1897.

Meyrat (EMILE)

Prepared fossil fishes from the Oligocene slates of Canton Glarus, Switzerland, purchased 1869.

Michalet (ALPHONSE)

Though engaged in business as a flower-merchant, both in Leipzig and at his residence near Reymier-Six-Fours (Var), Mr. Michalet has found time to make geological excursions in Algeria and to publish studies on the Bathonian and Cenomanian rocks near Toulon and their Echinoids (*Bull. Soc. Géol. France*, 1895, 1901). The former of these papers led to a correspondence with Mr. Michalet and to the purchase of some specimens from him in 1896; a larger purchase was made through the dealer, R. Damon, in 1897. These may be summarised as follows:—1195 Molluscs, 3289 Brachiopods, and 246 Corals, from the Senonian, Turonian, and Neocomian rocks of Provence, and from the Bathonian, Lias, and Muschelkalk of Var, also 435 Echinoderms and 4 Foraminifers from the Tertiary, Cretaceous, and Jurassic rocks of Algeria. All the specimens were provided with loose white paper labels in Mr. Michalet's handwriting.

Millar (JOHN)

Presented microscope-slides of fossil Invertebrata, 1888.

Milligan (JOSEPH)

Presented Palæozoic fossils from Tasmania, 1863.

Milne (JOHN)

Collected and presented Tertiary fossils from Sinai and Egypt, 1874; discovered bones of Great Auk in Funk Island, off Newfoundland, purchased 1875; presented Mesozoic fossils and Post-Pliocene Mollusca from Japan, 1882, 1888.

Mitchell (HUGH) [1822–1894]

Living at Craig, near Montrose, Mitchell made a collection of about 220 fossils from the Lower Old Red Sandstone of Forfarshire, including some important fishes, among which were the type-specimens of *Climatius scutiger*, Egerton, *Euthacanthus grandis*, Powrie, and *Ischnacanthus gracilis*, Egerton. This collection was purchased by the Museum from Dr. Mitchell in 1893.

Mitchell (Sir THOMAS)

Presented fossil Mollusca and silicified wood from northern Australia, 1848.

Mitchell (W. S.)

Discovered skeleton of *Aptornis defossor* at Castle Rock, S. Island, New Zealand, purchased from Mr. A. Hamilton, 1893.

Mitchell (W. STEPHEN)

Collected Middle Eocene plant-remains from Alum Bay, Isle of Wight, presented by the Council of the British Association, 1867.

Mitchinson (Right Rev. JOHN, Bishop)

Collected and presented Pleistocene Mollusca from Barbados, 1892.

Mohr (PAUL)

Collected numerous fossils, chiefly from Germany and France, purchased 1848.

Mojsisovics (EDMUND VON)

The former Vice-Director of the Imperial Geological Survey of Austria, who is well known as a writer on Triassic Cephalopoda, obtained for the British Museum a collection of 1300 Mollusca, chiefly Cephalopoda, from the Upper Trias of Hallstatt. It was purchased in two instalments in 1889 and 1890.

Monk (HENRY)

Mr. Monk, of Yeovil, collected fossils from the Inferior Oolite in the neighbourhood of that town. A selection of 580 Invertebrata from his collection was purchased in 1892, a second collection being purchased in 1897.

Montefiore (T. L.)

Plesiosaurian skull from Lower Lias, Lyme Regis, purchased 1878.

Moore (CHARLES)

Presented Upper Liassic Brachiopoda from Ilminster, 1849.

Moreno (FRANCISCO P.)

Presented plaster cast of hind limb of *Brontornis* from Lake Argentino, Patagonia, 1892.

Morris (JOHN)

Collected miscellaneous English fossil Invertebrata, purchased 1863. Presented Eocene Ostracoda, 1884.

Morton (GEORGE HIGHFIELD) [1826-1900]

Morton was occupied for forty years with geological researches near Liverpool, where he lived, and in North Wales. He published a volume entitled "The Geology of the Country around Liverpool," in 1863, a newer edition of the same in 1891, and an Appendix in 1897. Besides mapping the Liverpool district, his most important work was the detailed examination of the Carboniferous Limestone of North Wales, described in a series of papers published by the Liverpool Geological Society and in one read before the Geological Society of London (*Quart. Journ.*, 1898). His collection illustrated his researches, and also comprised many valuable Palæozoic fossils older than the Carboniferous, besides a jaw of *Phascolotherium* from the Stonesfield Slate. It was well catalogued and labelled by himself, and the greater part of it (a selection of 4000 specimens) was purchased by the British Museum from his executor in 1900.

Murchison (*Sir* RODERICK IMPEY) [1792-1871]

During his explorations on the continent of Europe, and among the lower Palæozoic rocks of these islands, the founder of the Silurian System made very large collections. Many of his specimens went to the Museum of the Geological Survey, of which he was long director; others, and especially most of those figured in the "Silurian System," to the Museum of the Geological Society. Many, however, were presented by him to the British Museum at intervals from 1842 onwards. Of these the most important was the figured counterpart half of the skeleton of the so-called fossil fox, bought by Murchison from a physician at Oeningen in 1828, developed by G. A. Mantell, described by R. Owen as *Galecymus*, and presented in 1852, the less important half going to the Geological Society. In 1854 Murchison presented over 800 British Silurian fossils, with others from the Silurian of Russia, the Tertiary of Poland, and the Cretaceous of the Austrian Alps. In 1872, his nephew and heir, Mr. Kenneth Murchison, presented a large series of fossils from various European formations, selected from the museum of Sir Roderick. On their receipt these were furnished with slips of blue paper on each of which is written "Murchison Colln."

Murray (*Sir* JOHN)

Presented Miocene Mollusca and other fossils from Malta, 1890. Transmitted the *Challenger* collection of deep-sea deposits, 1895.

Murray (PETER)

Collected Yorkshire Lower Jurassic plant-remains, purchased 1839.

Museum of Practical Geology

The collections of foreign fossils were transferred from this Museum to the British Museum in 1880. They included specimens collected or contributed by Risk Allah Effendi, W. G. Atherstone, R. A. Godwin-Austen, A. G. Bain, H. Bauerman, Sir H. T. de la Beche, Sir Edward Belcher, J. J. Bigsby, Bonehard, Bosquet, W. Buckland, J. Clark, Lieut. Cockburn, J. Crawford, Sir J. William Dawson, Earl of Enniskillen, E. Forbes, P. de la Harpe, R. Haul, Sir James Hector, O. Heer, J. D. Hooker, Evan Hopkins, W. Hottelart, E. Hubbert, Hudson's Bay Company, Capt. Ibbetson, Capt. Inglefield, J. B. Jukes, T. Kjerulf, Koch, L. G. de Koninck, A. Krantz, Linton, Sir William E. Logan, W. Lonsdale, Sir Charles Lyell, McChesney, G. A. Mantell, H. Milne-Edwards, John Morris, Lieut.-Col. Munro, Sir Roderick I. Murchison, Hon. Miss Murray, Capt. Nelson, Osborne, A. Phillips, Poole, S. P. Pratt, Sir Joseph Prestwich, T. Reeks, Ramain, E. Renevier, James Russell, J. G. Rutland, L. Saemann, F. Sandberger, Lieut. Sankey, Sir Robert Schomburgk, Sir H. Seymour, Sir Warington W. Smyth, Admiral Sir Thomas B. Spratt, Stokes, Capt. Strachey, Sutherland, D. Thompson, G. P. Wall, and the Ross Antarctic Expedition.

Natal, Government of

Presented Cretaceous Mollusca from Natal, 1894.

Newberry (JOHN STRONG)

Presented fins of *Cladoselache* from Upper Devonian of Ohio, 1888.

Nicholson (HENRY ALLEYNE) [1844-1899]

Among other researches the late Professor of Natural History at Aberdeen University devoted much attention to the Stromatoporoids, of

which he formed a large collection, the basis of his "Monograph of the British Stromatoporoids" (Palæontogr. Soc., 1885, 1888, 1890, 1892). It was purchased by the Museum through Mr. F. H. Butler in 1895.

Nicholson (J. G.)

Presented Jurassic Ammonites from Somaliland, 1891.

Nicol (WILLIAM) [1768-1851]

The inventor of the Nicol prism was also the first to devise a method of making thin slices of fossils, rocks, and minerals for microscopic examination. 313 slides of fossil wood made by him were purchased from J. Bryson in 1867.

Noble (JAMES)

Discovered type-specimen of *Holoptychius nobilissimus* from Upper Old Red Sandstone of Perthshire, purchased 1840.

Norris (W.)

Presented bivalve shells from Coal Measures of Newcastle, 1828.

Northampton (Marquess of)

Presented Tertiary shells from Italy, 1831.

Ogle (JOSEPH B.)

Mr. Ogle made an important collection of Middle Eocene fossils from Bracklesham Bay. About 1200 specimens, chiefly Mollusca, were selected from his collection and purchased from Mr. Ogle in 1891.

Owen (Sir RICHARD)

Many specimens given personally to Sir Richard Owen were presented by him to the Museum. They included the JOHN BROWN Collection (*q.v.*), specimens of *Archegosaurus decheni* from Rhenish Prussia (1861), gizzard stones and tracheal rings of Dinornithidæ from New Zealand (1870), the skull of *Prorastomus sirenoides* from Jamaica (1874), the natural cast of a Sirenian brain from the Eocene of Egypt (1875), and the type-tooth of *Macacus pliocenus* with other Mammalian remains (1884).

Owles (J. J.)

Mr. Owles, resident at Great Yarmouth, obtained from the local fishermen a valuable collection of Pleistocene Mammalian bones, dredged off the eastern coast and the Dogger Bank. The collection comprised about 300 specimens and was described by William Davies (*Geol. Mag.* 1878). It was purchased by the Museum from Mr. Owles in 1874.

Palin (F. D.)

Collected miscellaneous British fossil Invertebrata, purchased 1900.

Parish (JOHN)

Presented Mammalian remains from the Pampa of Buenos Ayres, 1865.

Parker (WILLIAM KITCHEN) [1823-1890]

While occupied with his early researches on the Foraminifera, Prof. Parker made a small collection of these organisms, recent and fossil. In 1892, 2000 slides mounted by him were purchased from his executor.

Parkinson (JAMES) [-1824]

Parkinson was in practice as a surgeon in Hoxton from 1785, or earlier, to his death. He wrote numerous medical and political books, but

is best known as author of "Organic Remains of a Former World" (1804-11), in the compilation of which he examined "the numerous valuable specimens" in the British Museum. The figures, however, were chiefly drawn from specimens in his own "tolerably large and systematic cabinet, obtained from the museums of Mr. Strange, Lord Donegal, M. Calonne, and of several other collectors" ("Org. Rem.," I., p. vi.). Among names elsewhere mentioned is that of Sir Ashton Lever. Mantell calls it a "matchless collection" (*London Geol. Journ.*, p. 14). Unfortunately it was dispersed by auction in April, 1827, at very low prices. "A great number of the zoophytes," says Mantell (*loc. cit.*), "were purchased by an American gentleman for a few pounds, sent to the United States, and were consumed by fire, with the museum in which they were contained." Mantell himself bought a bear's skull from Gailenreuth, and other specimens, which came ultimately to the British Museum. Others came in like manner through the Enniskillen collection. In the Sowerby collection, specimens marked with a "P" were bought at the Parkinson sale. The original of Vol. III., pl. xvi., f. 19, *Coronulites diadema*, bought by Rev. Thos. Image, of Whepstead, Bury St. Edmunds, was eventually obtained for the nation from Mr. W. Nelson Last, of Bury St. Edmunds. Among other museums to which Parkinson's specimens found their way, are those of Cambridge ("Life of Sedgwick," p. 280), of Oxford, and of Haslemere (*Museums Journ.*, ii., 117). To the Geological Society he presented various specimens in 1813 and 1814, but his name does not appear in the old records of donations to the British Museum.

Peach (CHARLES WILLIAM) [1800-1886]

Peach was in the coastguard service, and began his geological studies on the south coast of Cornwall. He was one of the earliest discoverers of fossils, including fish-remains, in the Devonian rocks of that county, and his first collection is now in the Penzance Museum. He removed to Wick, Caithness, in 1853, and again began to discover fossils, notably fishes, in the Old Red Flagstones of the cliffs near Wick, and invertebrates in the Silurian limestones of Durness, Sutherland. His Scottish collection, purchased by the British Museum in 1870, comprised 41 Silurian fossils from Durness, 130 Old Red Sandstone fishes and crustacean remains, 185 Jurassic fossils from Brora, and some Old Red Sandstone and Carboniferous plants. Many of the fishes bear small descriptive labels or notes in Peach's own handwriting.

Pearson (J. N.)

Presented Ordovician fossils from Ohio, 1851.

Pengelly (WILLIAM) [1812-1894]

Pengelly resided at Torquay and superintended the excavations in Brixham Cave and Kent's Cavern, which were respectively undertaken by the Royal and Geological Societies in 1858-59, and by the British Association in 1864-79. He also explored the Happaway Cave in 1862-63. Besides these researches, geological work and the collection of fossils in the Devonian, Carboniferous, Cretaceous, and Tertiary rocks of Devonshire and part of Cornwall, also occupied him for many years. The collection of remains from Brixham Cave, described by Prof. George Busk (*Phil. Trans.*, 1873), was presented to the British Museum in 1876. The first selection of the Kent's Cavern collection, described in the British Association Reports, was presented to the Museum by the Council of the British Association and Lord Haldon in 1883, while the second selection

was presented to the Torquay Museum. Most of Pengelly's Devonian fossils were purchased by the Baroness Burdett-Coutts for the Oxford Museum. From what remained of his collection at his death, a first selection comprising Pleistocene Mammalia from the Happaway Cave, various Devonian, Carboniferous, and Greensand fossils, was presented to the British Museum by Mrs. Pengelly in 1896; while a second selection was presented to the Museum of Practical Geology.

Pentland (JOSEPH BARCLAY) [1797-1873]

Pentland studied in Paris under Cuvier, and became interested in fossil Vertebrata. He collected a fine series of Upper Pliocene mammalian remains from the Val d' Arno, Italy, and presented it to the Museum in 1853. *Hippopotamus pentlandi* was named after him.

Penton (R. H.)

Presented dentition of *Myliobatis pentoni* from Eocene near Cairo, 1893.

Pepper (Miss)

Presented Mammalian remains from Perim Island, 1841.

Perceval (SPENCER GEORGE)

Presented Mammalian remains from Pen Park Cave, Westbury-on-Trym, 1884; pieces of Rhatic Bone-bed from Aust, 1889; and Invertebrata from the Lower Lias of Somersetshire, 1896. Arranged the purchase of the Westmoreland Collection of Red Chalk fossils, 1900.

Petzholdt (ALEXANDER)

Presented *Calamites* from the Coal Measures of Saxony, 1859.

Pfeiffer (Mrs.)

Presented Tertiary Echinoids from Java, 1855.

Phillips (Mrs. E. LORT)

Collected and presented fossils from Somaliland, 1896.

Pickering (J.)

Collected Pleistocene non-marine Mollusca from Grays and the Kennet Valley, presented by the Council of the Geologists' Association, 1892.

Piper (GEORGE HARRY) [1819-1897]

While resident at Ledbury for nearly fifty years Piper devoted much attention to the geology of the district. When the Hereford and Worcester railway was constructed, he studied the Ledbury station section of the Upper Silurian and Passage Beds, and made a large collection of the fossils obtained. Among these were unique specimens of Cephalaspidian fishes, especially *Cephalaspis murchisoni*, *Auchenaspis eyertoni*, and *Didymaspis grindrodi*, presented by Mr. Piper to the British Museum in 1887 and 1889, and described in the British Museum "Catalogue of Fossil Fishes," Part II. The remainder of his collection, comprising 150 fish-remains and about 1650 Upper Silurian Invertebrata, was purchased from his executor in 1898.

Plant (JOHN) [1820-1894]

Major Plant, curator of the Salford Museum, collected fish-remains and other fossils from the Coal Measures of Collyhurst, Manchester. His collection of about 450 specimens, including the type-specimen of

Rhadinichthys plauti, and four fragments of *Platysomida* described by Dr. Traquair, was purchased from him by the British Museum in 1892. All the specimens bear a printed locality-label.

Pohlig (HANS)

Among other important researches, Prof. Pohlig, of Bonn, has collected mammalian remains from the Lower Pliocene of Maragha, Persia, and from the caverns of Sicily. The former collection was noticed by him in the *Quarterly Journal* of the Geological Society (1886), and part of it was purchased by the British Museum through the dealer, R. Damon in 1888. The second collection comprised pigmy elephants, of which some typical remains were purchased by the Museum through Dr. F. Krantz in 1897.

Pomel (AUGUSTE) [1821-1898]

A native of Auvergne, Pomel while yet a boy was drawn by A. Bravard (*q.v.*) to the study of the Tertiary rocks of central France and their fossils, especially the mammals. He contrived opportunity to continue his scientific work while undergoing his seven years of enforced military service, and the French Geological Society and Academy of Sciences published valuable communications from Sergeant Pomel. Deprived at last of the hospitality of the barracks, he resumed work with Bravard in the deposits of Périer, Débruge, and Cuguron, and made notes for a proposed illustrated catalogue. In 1851, Pomel was sent to the Great Exhibition in London, and used the opportunity for study at the British Museum, where the services he was able to render were so much appreciated that, it is said, he was offered a post. He sold his collection of fossil vertebrates to the Trustees but declined the appointment, preferring to live in his own country. He had not reckoned on the *coup d'état* of December. While extricating vertebrate bones at St. Gérard-le-Puy, he was pursued by gendarmes for a too zealous republican. Bravard was transported to Cayenne, but Pomel hid until his sentence was commuted to banishment to Algeria. Here he at once produced his "Catalogue Méthodique et Descriptif des Vertébrés Fossiles découverts dans le Bassin de la Loire" (1853), in which many of the British Museum specimens are mentioned, and then quitted the study of his Auvergne fossils for ever. But he could not give up his science; his energy remained, and he became eventually Director of the Geological Survey of Algeria.

Ponsort (Baron)

Collected fishes from the Upper Cretaceous of Mont Aimé, Marne, purchased 1851.

Porter (JAMES)

Presented remains of *Aepyornis* from Madagascar, 1882.

Post (G. E.)

Presented Pliocene Mollusca from Latakia, Syria, 1885, 1886.

Postans (T.)

Presented fossil Mollusca from Cutch, 1843.

Potter (GEORGE)

Presented Invertebrata from English Chalk, 1899.

Power (EDWARD)

Presented the W. C. Lucy Collection of English fossils, 1895.

Powrie (JAMES)

Presented fossil Fishes and a nearly complete body of *Pterygotus anglicus* from the Lower Old Red Sandstone of Forfarshire, 1861, 1865. His large collection from the same formation and locality was purchased later by the Edinburgh Museum of Science and Art.

Pratt (SAMUEL PEACE) [1789-1863]

An enthusiastic student of many sciences, Pratt finally turned to geology in 1812, and during the rest of his long life collected many valuable specimens, with which he was most generous. In 1823 he went to Bath, where he resided for sixteen years, and this renders it probable that he was the donor, on March 8th, 1828, of "An undescribed crinoidal animal imbedded in Limestone from Bath," although J. E. Gray, who described it as *Apiocrinites prattii* (*Phil. Mag.*, 1828), referred to him as Mr. J. S. Pratt. At any rate, two years later, S. P. Pratt was a donor to the Natural History Departments of the Museum. His first work was on the freshwater formation at Binsted, Isle of Wight, where he discovered *Anoplotherium* and *Palæotherium* (*Trans. Geol. Soc.*, 1831). After this he travelled much on the continent, studying and writing on bone-caves near Palermo (1833), on the geology of Normandy (1837), of Bayonne (1843), of the Asturias (1845), and of Catalonia (1852). Pratt made numerous donations to the Geological Department, *e.g.*, in 1846, some remarkable Tertiary fossils including the gregarious cyprinodont fish *Lebias cephalotes* from Aix in Provence; in 1850 and 1851, various fossils from the Mesozoic formations of southern England and a series of Rudistæ and allied forms from the Chalk near Toulon; in 1854, a further series of those curious molluscs, some of which were figured by S. P. Woodward (*Quart. Journ. Geol. Soc.*, 1855); in 1852 nummulites, crinoids, and other invertebrates, from the Eocene of Biarritz, Nice, Barcelona, etc., among which the type of *Pentacrinus pratti*, Austin, is noteworthy; in 1853, brachiopods and other invertebrates from Asturias, the latter yielding specimens subsequently figured by Etheridge and Carpenter ("Catalogue of Blastoidea," 1886). Finally, in 1857, Pratt presented about 1000 selected specimens of invertebrates, chiefly from British Mesozoic rocks. Many of his specimens were placed in the Museum of the Geological Society, others in the Museum of Practical Geology, the foreign specimens among the latter being transferred to the British Museum in 1880.

Prestwich (Sir JOSEPH) [1812-1896]

During his long series of researches, Prestwich accumulated a large collection illustrating his work, and this was acquired by the British Museum in three instalments. The first, comprising 1755 specimens chiefly of British Eocene invertebrates and plants, was presented by the Professor in 1885. The second portion contained 1314 Carboniferous and Silurian fossils from Coalbrookdale, referred to in his memoir on the district (*Trans. Geol. Soc.*, 1840), also a few Vertebrata from the Crag, and some Pleistocene mammalian bones from Bedford; it was purchased in 1894, and was accompanied by a MS. catalogue by Prof. T. Rupert Jones. The third more miscellaneous portion, including some Palæolithic Implements and the Eolithic Implements from Kent described in "Some Controverted Questions of Geology," was presented by Lady Prestwich in

1896; with it was a MS. catalogue compiled by Prof. T. Rupert Jones. Few of the fossils bear any distinctive labels.

Reeve (W.)

Presented bones of *Dinornis casuarinus* from Glenmark Swamp, New Zealand, 1870.

Reid (CLEMENT)

Presented Pleistocene Mollusca from N. Italy and S. France, 1891.

Reid (JAMES)

Presented *Palaespondylus* and other Fishes from the Old Red Sandstone of Caithness, 1896.

Rich (WILLIAM)

This dealer, who had a shop opposite the British Museum, also kept a small establishment at Bristol, in which he was helped by his sister, Miss A. Rich, a very active and careful collector. She was one of the earliest to collect from the Lower Carboniferous Limestone series at Clevedon Bay, and the Austins acknowledge the help obtained from her in their "Monograph on Crinoidea" (see esp. pp. 71, 92). In 1867 the Trustees purchased from Rich 13 palatal teeth, 2 trilobites, and 287 remains of crinoids, collected as above, and including specimens of *Poteriocrinus plicatus* (Pl. ix., 4 A-c) and *P. pentagonus* (Pl. xi., f. 2D) figured by the Austins. The originals of Pl. ix. ff. 1 and 2A are not now to be found and probably never reached the Museum.

Richards (UPTON)

Presented Mammalian remains from Kent's Cavern, 1845.

Richardson (Sir JOHN)

Presented Arctic Palaeozoic Brachiopoda, 1848, and Tertiary leaves from the Mackenzie River, Canada, 1861.

Richmond (Duke of)

Presented Old Red Sandstone Fishes from Tynet Burn, 1859.

Rickard (T. A.)

Presented a Fish, *Priscacara*, from the Eocene of Wyoming, 1889.

Ripley

A collector and dealer in the fossils of the Whitby Lias, from whom were purchased a skull of *Steneosaurus* and a skeleton of *Pelagosaurus*, 1841, 1842.

Robertson (DAVID)

Presented Post-Tertiary fossils from the Clyde, 1883, 1884.

Rofe (JOHN) [1801-1878]

That Rofe was early a keen geologist is shown by the "Observations on the Geological Structure of the Neighbourhood of Reading," contributed by him to the Geological Society in 1834 (*Trans. G. S.*, 1837). Later on, while resident for twenty-five years at Preston as engineer to the gas-works, he made a fine collection of fossils, mainly Crinoids and Blastoids, from the Carboniferous Limestone of the neighbourhood, and, on his retirement, devoted himself to the study of their internal anatomy, on which he published valuable papers in the *Geological Magazine*.

In 1862, he presented a few invertebrates from Thornley Quarry, Chipping, including two figured specimens of *Orthoceras*. In 1864, he presented the type of *Amphoracrinus brevicelix* (*Geol. Mag.*, Jan., 1865), and in 1865, 50 specimens of Crinoids and Blastoids in illustration of his paper published the same year. Crinoids figured and described in 1869 and 1873, together with other Carboniferous fossils, over 1500 in all, were presented by him two months before his death, after which the rest of his collection of Palæozoic fossils was presented by his executors. Many of the Crinoids bear the marks of his study in the form of plates picked out with paint; but there are no individual labels.

Rowe (ARTHUR WALTON)

Presented Invertebrata from English Chalk, 1899.

Rowley (ROBERT R.)

Professor of Geology at Louisiana, Mo., Mr. Rowley has published papers on Blastoidea in the *Kansas City Scientist* (1891), and in the *American Geologist* (1893-1902). In 1894 the Museum purchased from him 16 Blastoids from Louisiana, ranking in some cases as metatypes.

Royal Society of London

Presented its collection of "natural and artificial curiosities," 1781. Among these were the original specimen of *Steneosaurus chapmani* from the Whitby Lias, originally described by Chapman in *Phil. Trans.*, 1758; a Plesiosaur from the Lias of Elston, Newark, described by Stukeley in *Phil. Trans.*, 1719; and a tooth of *Mastodon*, described in Grew's "Catalogue of Rarities in Gresham College," 1681.

Rufford (PHILIP JAMES) [1852-1902]

On coming to reside at Hastings, Rufford devoted himself to collecting fossils from the Wealden strata of the neighbourhood, especially at Ecclesbourne and Fairlight. Here he obtained a fine collection of Wealden plants, some of which were presented by him to the British Museum in 1885, while others were purchased at nominal valuations in 1890, 1891, 1892, 1893, 1894, and 1898. These were described in Mr. A. C. Seward's "Catalogue of Wealden Plants," published by the Trustees in 1893, 1894, and 1895. Attached to many of the specimens were labels pointing out features of interest, and these greatly assisted the describer. Some of the above-mentioned purchases included various Wealden fossils, both vertebrate and invertebrate, among which should be mentioned the vertebra of *Morosaurus brevis* figured by Mr. Lydekker (*Quart. Journ. Geol. Soc.*, 1893), and a head of *Lepidotus mantelli*, figured in the "Catal. Foss. Fishes B. M.," Part iii. Other specimens were presented by Rufford to the Brassey Institute, Hastings.

Rutland (Duke of)

Presented type-specimen of *Plesiosaurus rugosus* from the Lower Lias of Granby, 1840; a specimen of *Stigmaria ficoides* from Coal Measures near Nottingham, 1847.

Saemann (LOUIS) [1821-1866]

Having for about ten years served in the well-known establishment of Dr. Krantz at Bonn, Saemann in 1850 set up for himself as a dealer in Paris. He published important papers on stratigraphical palæontology, especially of Mesozoic rocks. Among the numerous important collections bought from Saemann between 1853 and 1870, mostly from the Mesozoic

rocks of France, and including the Astier collection (*q.v.*), was a series of 160 Lower Carboniferous Crinoids and Blastoids from Burlington, Iowa, containing 70 species determined by James Hall of Albany, purchased in 1862.

St. Petersburg, Imperial Academy of Sciences

Piece of skin of Mammoth from Siberia, by exchange 1892.

Salis (J. F. W. DE)

Presented skulls of *Bos longifrons* from Lough Gur, Limerick, 1865.

Salmond (WILLIAM)

Presented Mammalian remains from Kirkdale Cave, 1823, 1837.

Salter (JOHN WILLIAM)

Presented Arenig fossils from Pembrokeshire, 1866.

San Paulo Museum

Fishes from Tertiary Lignite at Taubaté, San Paulo, Brazil, by exchange 1898.

Saull (WILLIAM DEVONSHIRE)

A merchant in the City of London, Saull accumulated at 15, Aldersgate Street a remarkable collection of fossils and antiquities, spoken of by Mantell as "his interesting museum, to which visitors are, with great liberality, admitted every Thursday at twelve" ("Geol. I. of W.," Ed. iii., p. 232; 1854). The owner himself personally conducted the visitors, and such was his zeal for popular education that he left the collection with all his money to a body of trustees so that it might be kept for the public. The trustees founded the Metropolitan Institution in Cleveland Street, Fitzroy Square, and transferred the collection thither, packed up in wine-hampers. In those hampers it remained, while the money was devoted to carrying on a school, which gradually became little more than a place of evening amusement for the young men and women employed at large shops in the neighbourhood. The collection proving a difficulty, the trustees decided to sell it, and were engaged in so doing in 1863, when Mr. John Calvert took the remaining seven van-loads off their hands. The British Museum had already selected—and paid for—such specimens as could be seen to be still of value in the lamentable state to which the collection had been reduced. Among the 200 fossils thus acquired were the sacrum of the *Iguanodon* and other specimens figured in Owen's "British Fossil Reptiles" (Palaeontogr. Soc.), also a large number of Invertebrata named and labelled by James Sowerby, and supposed to include some of the type-specimens of his "Mineral Conchology"; their identification, however, is doubtful.

Savin (ALFRED C.)

Mr. Savin, a resident of Cromer, made a large collection of vertebrate remains, chiefly mammalian, from the Forest Bed Series of the Norfolk Coast. The bones bear numbers in white paint, corresponding with the exact records of their discovery entered in Mr. Savin's MS. Catalogue. The collection is described by Mr. E. T. Newton in "Vertebrata of the Forest Bed Series" (1882) and "Vertebrata of the Pliocene Deposits of Britain" (1891), published by the Geological Survey. It also afforded material for description by Profs. Leith Adams and Ray Lankester. The whole series of 1898 fossils was purchased by the Trustees in 1897.

Saxby (STEPHEN M.)

W. H. Fitton says that "Mr. Saxby, of Mountfield near Bouchureh (Isle of Wight) . . ., a zealous and judicious collector," lent him various specimens (*Quart. Journ. Geol. Soc.*, iii. Proc. p. 326*). One of these formed the type of *Nautilus saxbii*, Morris, 1848. A series of fossil Mollusca from the Isle of Wight was purchased of Saxby in 1865, and included that type-specimen (47,019). Further references to his collections from the neighbourhood of Bouchureh are made by Mantell ("Geol. Isle of Wight," 1854), who gives his address as Bellevue House, Ventnor.

Schomburgk (Sir ROBERT HERMANN) [1804–1865]

In 1830 Schomburgk went to the West Indies and spent ten years in important geographical researches. In 1841 he was a member of the Boundary Commission for British Guiana. During these expeditions he collected many Tertiary fossils, which he presented to the Museum in 1852. Other specimens collected by him were received from the Museum of Practical Geology in 1880.

Scott (ROBERT HENRY)

Presented Tertiary leaves collected by Edward Whymper in Greenland, 1869.

Scott (WILLIAM BERRYMAN)

Arranged purchase of Mammalian remains from the White River Formation, Dakota, 1896.

Seeley (HARRY GOVIER)

With the aid of a Government Grant, Prof. Seeley visited Cape Colony in 1889 to collect fossil Reptilia from the Karoo Formation. He obtained numerous important specimens, including skeletons of *Pariasaurus bairdi*, *P. bombidens*, *Cynognathus crateronotus*, and remains of other genera and species, described by himself (*Phil. Trans.*, *Quart. Journ. Geol. Soc.*, and *Ann. and Mag. Nat. Hist.*). These fossils were received as a donation through the Council of the Royal Society at various dates from 1892 onwards.

Sharp (SAMUEL) [1814–1882]

While a boy at Stamford, Lincolnshire, Sharp studied the Oolitic rocks around his house with Prof. J. Morris and other geologists, and made a large and valuable collection of fossils. In 1857 he moved to Dallington Hall, near Northampton, where he continued to collect from the Jurassic rocks, availing himself of the numerous excavations then being carried on for raising the iron ore of the Northampton Sand. The general results of his observations were published by the Geological Society of London (*Quart. Journ.*, xxvi. p. 354, 1870; and xxix. p. 225, 1873). Sharp's collection was also utilised by J. Morris in his "Catalogue of British Fossils," and in *Quart. Journ. Geol. Soc.*, ix., Proc. p. 317. Sharp placed many of his geological specimens in the Northampton Museum, of which he was a founder; but a selection of over 1500 of the better specimens, especially those illustrating the papers just mentioned, was purchased for the British Museum in 1876. The specimens, which are carefully labelled in a bold upright hand, comprise invertebrates of all classes, from the Oolitic and Liassic series of Northamptonshire, Lincolnshire, and Rutland, reptiles from the same rocks, and mammals from the Forest-bed and Drift of the eastern counties. The figured and described specimens include an incrustated *Chara* (*Geol. Mag.*, 1868), the types of

Stellaster sharpi and *Astropecten cotteswoldiæ* var *stamfordensis*, and another *A. cotteswoldiæ*, all figured by T. Wright (Palæontogr. Soc.), also the type of *Penæus sharpi*, H. Woodward (*Rep. Brit. Assoc.* for 1868) from the Lower Lias, Northampton. The rest of the Sharp collection was acquired by the Mason College, Birmingham, and is now in the museum of the University: in addition to Jurassic fossils, it contains an excellent stratigraphical series, from the Cambrian to Recent.

Sharpe (DANIEL)

Presented Pleistocene Mammalian remains from Erith and Grays, 1850.

Shelburne (Earl of)

Presented remains of *Mastodon americanus* and a molar of *Mastodon humboldti*, 1767.

Sherborn (CHARLES DAVIES)

Collected London Clay Foraminifera, purchased 1886; English Chalk fossils, presented 1899.

Shockley (W. H.)

Presented Upper Carboniferous Invertebrata from Shansi, China, 1898.

Shrubsole (GEORGE WILLIAM) [1827-1893]

Resident in Chester from 1853 until his death, Shrubsole was a geologist and archæologist with many interests, but made a special study of the Palæozoic Polyzoa, and collected an important series of these fossils, notably from the Bala and Carboniferous Limestones of North Wales, the Wenlock Limestone of Dudley, and Magnesian Limestone of Northumberland. He published several papers on the subject (*Quart. Journ. Geol. Soc.* 1879-1882), and his collection was presented to the British Museum by his son, Mr. George Shrubsole, in 1896. Many Ordovician fossils from the Glyn Ceiriog district were presented by him to the museum of the Chester Society of Natural Science, of which he was a founder.

Shrubsole (WILLIAM HOBBS)

Resided for many years at Sheerness and collected fossils from the London Clay of Sheppey. Discovered skull of *Argillornis longipennis*, purchased 1880; skull of *Chelone gigas*, purchased 1880; Diatoms, presented 1881; and *Prophaethon shrubsolei*, purchased 1898.

Sikora (F.) [-1902]

Mr. Sikora was a skilled collector and obtained many important bones of extinct Lemuroids and other vertebrates from the caverns of Madagascar. Some of these were purchased from him in 1900 by the British Museum, others by the Vienna Museum. The former have been and are being described by Dr. Forsyth Major, the latter by Dr. Lorenz

Simmons (JEREMIAH)

An expert collector of Chalk fossils, from whom many specimens were purchased. He prepared the unique group of *Oreaster bulbiferus*, purchased 1873.

Simonson (A.)

Mr. Simonson collected remains of *Tremataspis*, *Auchenaspis*, and other Ostracoderms, in the Upper Silurian of Oesel, an island in the Baltic.

A small selection of specimens was purchased from him in 1894, and a *Tremataspis* from his collection was subsequently purchased through Dr. Krantz.

Singley (J. A.)

Collected Tertiary and Cretaceous Mollusca from Galveston, Texas, purchased 1897.

Slatter (ANN TAYLOR)

Miss Slatter was sister to T. J. Slatter (*q.v.*) of Evesham. Having been attracted by numerous fossil corals scattered over the surface of a ploughed field at Fairford, Gloucestershire, she not only collected these, but subsequently obtained beautiful specimens from excavations made for the purpose in the underlying bed, which was at the base of the Cornbrash. She gave many of her specimens to Mr. Brown of Cirencester, who lent them, among others, to P. Martin Duncan for description. Miss Slatter's own specimens were examined, and some of them described, by Mr. R. F. Tomes, notably the type of *Bathycœnia slatteri* (*Quart. Journ. Geol. Soc.*, 1883 and 1885). In 1899 the Trustees purchased from Miss Slatter 695 corals including several of the described specimens, and about 100 other Oolitic Invertebrata.

Slatter (THOMAS JAMES) [1834-1895]

While serving as clerk and manager in various branches of the Gloucestershire Bank, Slatter studied the geology of the county, and made a large collection, chiefly of Jurassic fossils, which were carefully labelled in his own small and neat handwriting. On his retirement, he settled with his collection at Evesham. Many of the corals collected by himself and his sister Anne (*q.v.*) were studied by R. F. Tomes. Nearly 5000 specimens selected from this collection were purchased by the Museum from Slatter's executor in 1896. In the selection was included a fine antler of reindeer from the river-gravels near Evesham.

Slimon (ROBERT)

Collected Upper Silurian Crustacea from Lanarkshire, purchased 1878.

Sloane (Sir HANS) [1660-1753]

In this place, it is only necessary to recollect the facts that among Sloane's collections of natural history objects, were those he made in Jamaica, 1687-88, and the valuable cabinets of William Courten acquired by Sloane on the latter's death in 1702. A general account of Sloane's collection as it existed at Chelsea is given in the *Gentleman's Magazine*, 1748 (pp. 301-302). The collection, as purchased by the nation in 1763 included many "extraneous fossils, comprehending petrified bodies, as trees, or parts of them, herbaceous plants, animal substances," etc., described as being a collection "the most extensive and most curious that ever was seen of its kind." In "The General Contents of the British Museum," Ed. i., 1761; ii., 1762, we find the following fossils mentioned: Helmintholithi [corals], Cochlites, Ammonitæ, Ostracites, Anomia [Brachiopods], Conchites, Pectinites, Echinites, Belemnites, Asteriæ, Trochites and Entrochi, Ichthyolithi, Zoolithi [Mammal bones], Phytolithi. The collection was of a very miscellaneous character, and comprised common fossils not only from Britain, but also from abroad. Each specimen bore a register-number, written in ink on a square ticket of white paper, and was entered in a MS. Catalogue, which is preserved in the Library of the Department of Geology. Two bits of petrified wood,

and 84 invertebrate fossils from the collection can still be identified with certainty, about a dozen others being less certain; further, several fish-remains bear the Sloane labels; and a few Mammalian fragments are still duly marked. No. 528 is noteworthy as "An Echinites from Agostino Scilla's Collection": Scilla's book was published at Naples in 1670, and a Latin translation at Rome in 1724.

Slone (*Mrs. E.*)

Cheirotherian footprints from Trias of Cheshire, purchased 1848.

Smith (GEORGE)

Presented *Glossopteris* from Natal, 1876.

Smith (*Mrs. M. H.*)

This lady, who lived at Mayo House, Tunbridge Wells, not only purchased valuable specimens from quarrymen and collectors, but collected herself, especially from the Chalk, and worked with the microscope until prevented by blindness. She presented fossils to Mantell and the Brighton Museum, and a few to the British Museum; and her collection was utilised by F. Dixon in his "Geology of Sussex." A MS. "Catalogue of Fossil Organic Remains" in her cabinet, compiled and illustrated by S. P. Woodward, with other drawings by W. H. Bensted, G. A. Mantell, and J. Delves, is preserved in the Library of the Geological Department. On Mrs. Smith's death the collection passed to her daughter, Mrs. Bishop of Bramcote, near Nottingham. She also died before long, and in 1878 the greater part of the collection was sold to the British Museum by the second Mrs. Bishop. It consisted of 248 complete specimens and about 130 fragments, and included the type-specimen of *Dolichosaurus longicollis*, Owen, with specimens of *Pterodactylus conirostris*, *Polyptychodon interruptus*, *Plesiosaurus*, and Chelonians, all figured by Owen in either the first or second edition of Dixon's book, and in his "Reptilia of the Cretaceous Formations" (*Palæontogr. Soc.*, 1851); type-specimens of *Saurocephalus lanciformis*, Agass., *Pachyrhizodus basalis*, Dixon, with a specimen of *Edaphodon mantelli* also figured in the same work; fine specimens of *Enoplocyrtia leachi* and *E. sussexensis*, some figured; *Oreaster coronatus*, *Goniaster regularis*, and the type of *G. smithiæ*, figured by Forbes in Dixon. A cabinet of small Chalk fossils from Mrs. Smith's collection was bequeathed by Mr. Bishop, who died in 1877, to the then proposed Nottingham Museum, while a small collection, arranged by his first wife, was retained by his widow. Mrs. Bishop, who subsequently moved to Watford (Herts), presented the Museum with the above-mentioned catalogue in 1892.

Smith (P. J.)

Palæozoic fossils from Tasmania, purchased 1880.

Smith (TOULMIN)

Smith, who lived at Highgate, devoted many years to the investigation of the British Cretaceous sponges, especially those known as Ventriculites, on which he published papers in the *Annals and Magazine of Natural History*, in 1848. His collection, purchased from his widow in 1869, included no less than 1060 specimens of such sponges, comprising those described by him. It also contained some shells from the London Clay of Highgate and reptilian and fish remains from the Chalk, the latter including the jaws figured by him (*London Geol. Journ.*, p. 22) and subsequently referred to *Pachyrhizodus gardneri*. In the same

year, Miss Toulmin Smith presented a scrap-book containing figures and diagnoses of the Ventriculitidæ of the Chalk, partly from Toulmin Smith's papers, partly in MS. Smith had previously presented a collection of Cretaceous sponges to the Manchester Museum.

Smith (WILLIAM) [1769-1839]

The "Father of English Geology" made a collection of fossils to illustrate his "Strata Identified" and other works. It was purchased in 1816.

Sömmerring (SAMUEL THOMAS VON) [1755-1830]

This eminent anatomist made from the Lithographic Stone of Bavaria a small collection of fossils, which was purchased in 1827. It included the type-specimens of *Lacerta gigantea* (*Geosaurus*, Cuvier) and *Crocodylus priscus* (*Aeolodon*, Meyer) described by Sömmerring himself.

South Australian Geological Survey

Presented South Australian fossils, 1886, 1887.

South Australian Museum

Presented Marsupial remains from Australia, 1861.

Sowerby (JAMES) [1757-1822]

Well known for his work in many branches of Natural History, Sowerby set an enduring mark on British Palæontology by the publication of "The Mineral Conchology of Great Britain," which appeared in parts from 1812 to 1846, being carried on after Sowerby's death by his son and fellow-worker, James de Carle Sowerby, with some assistance from George Brettingham Sowerby the first, and J. W. Salter. James Sowerby himself presented various Secondary fossils from France in 1821, but the "Sowerby Collection" was purchased of J. de C. Sowerby in 1860. It consisted of about 5000 fossils from all parts of England and of every geological age, and included the majority of the specimens figured in the "Mineral Conchology." These latter were marked by circular paper tickets of a dull bluish-green tint and 7.2 mm. in diameter. The Sowerby Collection, as then received, contained specimens from many older collections, the most noticeable of which were those of Jas. Parkinson, Wm. Martin, and the Rev. George Cookson (*qq.v.*). The remainder of the specimens figured in the "Mineral Conchology" were in various collections and some can no longer be traced. A good proportion of them have, however, since found their way to the British Museum in the collections of J. S. Bowerbank, P. B. Brodie, F. Dixon, F. E. Edwards, W. Gilbertson (including that of Alex. Moore), G. A. Mantell, S. V. Wood, and N. T. Wetherell (*qq.v.*).

Sowerby (GEORGE BRETtingham, the First) [1780-1854]

The second son of James Sowerby (*q.v.*) assisted his father and brother in the preparation of the "Mineral Conchology," and was one of the conductors of the *Zoological Journal*, to which he contributed descriptions of Blastoids in the collection of Wm. Gilbertson (*q.v.*).

Sowerby (JAMES DE CARLE. Son of James Sowerby (*q.v.*)) [1787-1871]

Spearing (H.)

Presented jaws of Rodentia from New South Wales, 1897.

Spencer (E.)

The type-skull of *Crocodylus spenceri*, purchased 1846.

Spratt (*Vice-Admiral* THOMAS A. B.) [1811–1888]

While surveying in the Mediterranean, Spratt made geological observations on many of the little-known coasts, partly in association with Prof. Edward Forbes. He forwarded some small donations of fossils to the Museum at different times, until in 1878 he presented an important collection of remains of pigmy elephants and hippopotamus, with a few bones of birds and land tortoises, from the Zebbug Caves, Malta. The remains of elephants in this collection were described by G. Busk (*Trans. Zool. Soc.*, vol. vi.); the Chelonia by Leith Adams (*Quart. Journ. Geol. Soc.*, 1866); and the birds by Mr. Lydekker (*Proc. Zool. Soc.*, 1890, and "Catalogue of Fossil Birds in the British Museum," 1891).

Springer (*Hon.* FRANK) [1848–]

Associated with C. Wachsmuth (*q.v.*) in the formation of a large collection of Crinoidea at Burlington, Iowa, and in the production of important works on their structure and classification, Mr. Springer, who is now a leading barrister in New Mexico, has, since the death of his colleague, continued to publish papers, notably "Uintacrinus; its Structure and Relations" (1901). Remarkable specimens illustrating this memoir were presented by Mr. Springer in 1900.

Spurrell (FLAXMAN)

Dr. Flaxman Spurrell and his son, Mr. Flaxman C. J. Spurrell, of Belvedere, made an extensive collection of Pleistocene Mammalia from Thames deposits at Crayford, Kent. Some of the specimens were described or noticed by Falconer, Dawkins, and Sanford. The greater part of the collection, comprising the skull of *Felis leo* and numerous other important specimens, was presented to the Museum by Mr. F. C. J. Spurrell in 1893. Mr. F. C. J. Spurrell's own collection of implements and bones from a Palæolithic floor, described in the *Quarterly Journal* of the Geological Society (1880), was presented by him to the Department of Geology in 1895.

Spurrell (FLAXMAN C. J.)

See SPURRELL, FLAXMAN.

Squires (*Mrs.*)

Dried neck and legs of *Dinornis didinus* from a fissure in New Zealand, purchased 1882.

Stanhope (*Lady* ESTHER)

Collected and presented Cretaceous Fishes from the Lebanon, 1817.

Stanley (*Lord*)

Presented Australian Palæozoic Brachiopoda collected by Dr. Jeanneret, 1846.

Stephens (DARELL)

Discovered type-specimen of *Steneosaurus stephani* in Cornbrash of orset, purchased 1878.

Stephens (T.)

Presented remains of *Glossopteris* Flora from Tasmania, 1898.

Sternberg (C. H.)

A well-known collector of Kansas Chalk fossils, from whom were purchased specimens of *Platecarpus*, *Clidastes*, *Tylosaurus*, and Fishes in 1900.

Stirling (EDWARD CHARLES)

Discovered limb-bones of *Genyornis newtoni* from Mulligan Springs, South Australia, obtained by exchange 1897.

Stobart (W. C.)

Presented counterpart of type-specimen of *Lepidotosaurus duffi* from the Magnesian Limestone of Durham, 1886.

Stock (THOMAS)

A collector of fossils, from whom were purchased Coal-plants from the Forest of Dean (1893), and Crinoids from the Carboniferous Limestone of Alveston, Bristol (1894).

Stoddart (DAVID A.)

Presented Mammalian remains from the Pampa Formation of Uruguay, 1865.

Stokes (CHARLES) [1783-1853]

"A respected member of the [London] Stock Exchange, full of vast research in the Natural History Sciences, and remarkable for literary and antiquarian, musical and artistic knowledge," Mr. Stokes, while assiduously engaged in business, devoted his means and leisure to the advancement of science. "He collected rare and interesting specimens at any cost," says Edward Forbes, "not for their own sakes, but to place at the disposal of any competent person." Among those who acknowledged such help were Murchison, J. S. Miller (*Nat. Hist. Crinoidea*), A. Brongniart, and James Parkinson. Trilobites and zoophytes were among his favourite subjects. In the *Transactions* of the Geological Society (ser. 2, vol. v., 1837), he published a paper on the petrification of wood, and another on "Some species of *Orthocerata*" (1840). On January 15th, 1823, he presented to the Museum "two specimens of *Entomoiithes* in *Shistus* from France," and in 1827, several varieties of agatised wood. His collection, purchased from his executors in 1854, in addition to corals and other invertebrates, comprised an extensive series of *Orthocerata*, chiefly from North America, including the type-specimens figured by himself (*op. cit.*) and by J. J. Bigsby (1824). Many of his specimens are in the Museum of the Geological Society, and others in the Museum of Practical Geology, from which some foreign Jurassic *Ammonites* collected by him were transferred in 1880. His fossil fishes, mentioned by Agassiz, came to the Museum in the Enniskillen and Egerton collections.

Strachey (Sir RICHARD) [1817-]

When a captain in the Bengal Engineers in the years 1818-49, Sir Richard Strachey was employed by the Indian Government in scientific researches of a miscellaneous nature in the Northern Himalayas. He read before the Geological Society a paper "On the Geology of part of the Himalaya Mountains and Tibet" (*Quart. Journ.*, 1851). The Silurian, Carboniferous, Triassic, and Jurassic fossils mentioned therein, were developed by him, mounted on tablets, and presented to the Museum of Practical Geology, where they were described by J. W. Salter and H. F. Blanford in a pamphlet entitled, "Palæontology of Niti, etc. . . . reprinted

with slight correction for private circulation from Colonel R. Strachey's forthcoming work on the physical geography of the Northern Himalaya," Calcutta, 1865. The complete work, however, never appeared. The specimens were transferred to the British Museum in 1880; they are accompanied by the old label of the Geological Survey, and many of them bear the collector's number, written on the stone in ink.

Strzelecki (PAUL EDMUND DE, *Count*) [1796-1873]

Strzelecki was a German traveller, who during twelve years explored or visited both North and South America, part of the West Indies, the South Sea Islands, Tasmania, the Javanese Islands, part of China and the East Indies, and Egypt. In 1839, he discovered the existence of gold in the Australian colonies, and is best known by his "Physical Description of New South Wales and Van Diemen's Land," 1845, in which many fossils chiefly of Permo-Carboniferous age were described. He sold his collection of 135 fossils from New South Wales, including those described in his book, to Prof. John Morris, from whom it was bought by the Trustees in 1859. Two of the figured specimens of *Sphenopteris* are, however, in the Museum of the Geological Society.

Stürtz (BERNHARD)

This well-known dealer in minerals and fossils at Bonn, made a special collection of Lower Devonian star-fishes from Bundenbach in connection with his researches published in *Palæontographica* (1886, 1890). The original collection of 112 specimens was purchased by the Museum from Mr. Stürtz in 1891, while small additions, similarly acquired in 1893 and 1900, illustrate his subsequent papers (*Verhandl. nat. Ver. Preuss. Rheinland*, l., lvi.). Each specimen bears a detailed label in Mr. Stürtz's handwriting, with his name printed on it.

Sutherland (PETER C.)

In 1850-51, H.M.S.S. *Lady Franklin* and *Sophia*, under the command of William Penny, voyaged to Baffin Bay and Barrow Straits in search of the missing crews of H.M.S.S. *Erebus* and *Terror*, i.e., the Sir John Franklin expedition. Sutherland was surgeon to the expedition. The fossils he collected, with others belonging to Captain Ommanney, Mr. Pickthorne, and Mr. Donnett, were described by J. W. Salter in an appendix to Sutherland's account of the voyage (Vol. ii., pp. ccxvii-ccxxxiii). Sutherland's collection was transferred from the Museum of Practical Geology in 1878.

Styan (F. W.)

Presented Crinoidal limestone from Szechuen, China, 1899.

Surgeons, Royal College of

Presented plaster casts of bones of *Megatherium* to complete model of skeleton, 1834.

Sweet (GEORGE)

Discovered and presented a specimen of *Belonostomus sweeti* from the Cretaceous of Queensland, 1895.

Swindon Brick and Tile Company

Presented *Omosaurus armatus* from the Kimmeridge Clay of Swindon, 1874.

Swinhoe (ROBERT)

Teeth of Pliocene Mammalia from a cavern near Ching-King-Foo, China, purchased 1870.

Sykes (Lieut.-Col.)

Presented Tertiary Mollusca from India, 1857.

Szajnocha (L.)

Presented Devonian and Silurian fossils from Galicia, 1888.

Tabor (Mrs. H.)

Tertiary Polyzoa from New Zealand, purchased 1894.

Tate (GEORGE)

Presented English Carboniferous and Permian Brachiopoda, 1852.

Taylor (HENRY WILLIAM)

Taylor was, says E. Forbes, "well-known for his fine collection of Chalk fossils, which he spared neither time nor expense to bring together." In 1854, the Museum purchased from his executors many very choice fossils, chiefly star-fishes, sea-urchins, crustaceans, and fishes.

Taylor (JAMES)

Presented remains of *Stagonolepis* from Trias of Elgin, 1859.

Taylor (J. W.)

Presented Tertiary leaves from Disco, Greenland, 1863.

Tennant (JAMES)

A lecturer on Geology and Mineralogy and a dealer from whom many specimens were purchased. An extensive selection from his private collection of English fossils was purchased from his executors in 1881-82.

Tesson

Resident in Caen, Tesson, who was a friend of the Deslongchamps and other geologists, made a fine collection chiefly from the Jurassic rocks of Normandy, but including specimens from other horizons and localities. A few molluscs were acquired from Tesson in 1855, but the main collection was purchased by the Trustees in 1857. It contained the type-specimens of *Ammonites tessonianus*, d'Orbigny (*Paléontologie Française*, 1842) and *Teudopsis bunelii*, Deslongchamps (*Mem. Soc. Linn. Normandie*, 1835), some brachiopods referred to by Davidson, and unique remains of *Teleosaurus* and *Pelagosaurus* described by Deslongchamps.

Thomas (ETHEL A.)

Presented the W. F. Jennings' Collection of miscellaneous English fossil Invertebrata, 1892.

Thompson (D'ARCY WENTWORTH)

Presented a paper model of *Pterichthys* made by Hugh Miller, 1898.

Thomson (A. M.)

Presented Marsupial and Rodent remains from the Wellington Caves, New South Wales, 1870.

Thomson (JAMES)

Presented polished sections of Carboniferous Corals, 1871.

Thorburn (R. M.)

Presented Post-Pliocene Mollusca from Uddevalla, Sweden, 1888.

Thornhill (B. CLARKE)

Presented two Tertiary Brachyurous Crustacea from Akita, N. Japan, 1891.

Thornton (GEORGE)

Presented slab of Petworth marble, 1841.

Tomes (ROBERT F.)

Presented English Jurassic Corals, 1885; Calci-sponges from the Inferior Oolite, 1894.

Tomkins (H. G.)

Discovered a remarkable Coral, *Amplexus*, from the Carboniferous Limestone of Weston, purchased 1892.

Touche (TOM DIGUES LA)

Presented Nummulitic Limestone from Singhe Là, Himalaya, 1897.

Townsend (Mrs.)

Presented a Dinosaurian ischium from the Stonesfield Slate, 1851.

Traquair (RAMSAY HEATLEY)

Presented plates of *Asterolepis maxima* from the Upper Old Red Sandstone of Nairn, 1894.

Trevelyan (Sir JOHN)

Agassiz, in "Recherches sur les Poissons Fossiles," writes, "à Wallington, le musée de Sir John Trevelyan m'a paru très remarquable; il contient surtout une collection magnifique de coquilles et d'échinodermes." The Museum was inherited by his son, Sir Walter Calverley Trevelyan (*q.v.*), but it is interesting to note here that a lower molar of *Elephas primigenius* from St. Audrie's, Somersetshire, mentioned by Sir John in a note to Dean Buckland (*Proc. Geol. Soc.*, 1842), was presented by Mr. Spencer George Perceval in 1902.

Trevelyan (Sir WALTER CALVERLEY) [1797-1879]

The son of Sir John Trevelyan, the fifth baronet, of Nettlecombe, Somersetshire, and Wallington, Northumberland, Trevelyan early turned to geology, and the Geological Society published papers by him from 1829 to 1846. In the latter year, he succeeded to the title and to his father's museum at Wallington, which he extended. It contained "a good series of British and Italian fossils, valuable collections of minerals and recent shells, a good series of Ethnological specimens, together with a general Natural History collection of objects, most of which he had himself obtained during his travels." He bequeathed to the British Museum a valuable series of fossils comprising: a type-specimen of *Amblypterus nemopterus*, Agassiz ("Poissons Fossiles") and other fish remains of Carboniferous age; specimens of *Cephalaspis lyelli* from Forfarshire; a large series of vertebrate remains from Kent's Hole, Torquay; coal-plants from Burdie House; various invertebrata from the Carboniferous and Magnesian Limestones; and Miocene shells from Italy. Other museums that benefited by his liberality in the matter of fossils were the Museum of Practical Geology and the Oxford Museum.

A part of his collection was inherited by his nephew, Mr. Spencer George Perceval.

Tristram (HENRY BAKER)

Collected Cretaceous fishes from the Lebanon, purchased 1865.

Tryon (HENRY)

Presented nodules containing Fishes from Glacial Clay, Bindalen, Norway, 1887.

Turner (Mrs. E.)

Presented fossil Corals from Antigua, 1891.

Turner (Major HARLOWE)

Presented a *Plesiosaurus* from the Lower Lias of Bennington, 1880.

Ulrich (EDWARD O.)

Mr. Ulrich, of Newport, Ky., is well known for his writings on the American Palæozoic Polyzoa published in the *Journal* of the Cincinnati Society of Natural History (1879-1890), in the *American Geologist*, in the eighth volume of the Geological Survey of Illinois (1890), and especially in the *Report* of the Geological Survey of Minnesota (1886 and 1895). In 1898 the Trustees purchased from him 370 specimens of American Palæozoic Polyzoa, representing 720 species and varieties, and named by Mr. Ulrich, followed in 1899 by 38 specimens and 500 microscope-slides prepared from the same fossils.

United Service Museum

Skull of *Elephas namadicus* from the Pleistocene of the Narbada Valley, India, purchased 1860.

U. S. National Museum

Skull of *Castoroides ohioensis* from the Pleistocene of Illinois, by exchange 1899.

Upton (W. J.)

The type-skeleton of *Dinornis parvus* from New Zealand, purchased 1880.

Van Breda (JACOB GIGSBERTUS SAMUEL) [1788-1867]

The collection of Prof. Van Breda, of Leyden, was catalogued in a small pamphlet "Aperçu Général de la Collection Paléontologique Van Breda," and comprised about 1900 fossils from the Miocene of Oeningen, the Upper Cretaceous of Maastricht, and the Lithographic Stone of Bavaria. Some of the Fishes from Oeningen and Bavaria, and *Chelonia* from Oeningen and Maastricht, were described in memoirs by Dr. T. C. Winkler. Three Pterodactyls were described by H. von Meyer. The remains of *Mosasaurus* and Turtles from Maastricht, many collected by Van Breda's father-in-law, Peter Camper, are specially valuable. The whole collection was purchased by the British Museum from Prof. Van Breda's executors in 1871.

Verbeek (R. D. M.)

Presented fossil Fishes from Tertiary Lignite at Padang, Sumatra, 1876.

Vicary (WILLIAM)

Presented a slab of Devonian Crinoidal limestone from Newton Bushell, 1881; Greensand fossils from Blackdown, 1884.

Vine (GEORGE ROBERT) [-1893]

Vine, of Sheffield, contributed Reports on Fossil Polyzoa to the British Association (1880-84 and 1890-92), and several papers on the same subject to the Geological Society (*Quart. Journ.*, 1882-90), and the Yorkshire Geological Society (*Proc.*, 1889-92). His collection of 1695 specimens, mounted and labelled by himself and referred to in these writings, was purchased from him by the British Museum in 1893. Other specimens described by Vine were acquired in the collection of T. Jesson (*q.v.*).

Wachsmuth (CHARLES) [1829-1896]

Wachsmuth collected crinoids and other fossils from the Lower Carboniferous limestone near Burlington, Iowa. At the invitation of Agassiz, he visited Cambridge, Mass., in 1865, and then proceeded to Europe, where, after studying in various museums, he came to the British Museum, to which he sold two Burlington crinoids (1866). On his return to America his collection was utilised by himself and others for serious study, and was eventually sold to Agassiz. Wachsmuth then made a second collection, which he brought with him on his second visit to Europe in 1874, and sold to the British Museum. Again he settled down, this time in co-operation with Mr. Frank Springer, to make perhaps the finest collection of crinoids in the world, and to begin that series of remarkable papers which culminated in the "North American Crinoidea Camerata" (1897). In 1887, Mr. Springer studied the fossil crinoids in the British Museum, then newly arranged according to Wachsmuth and Springer's classification, and effected an exchange of great benefit to the national collection. The 316 specimens of crinoids and blastoids acquired in 1874, and the 83 specimens received in 1888 "contain many of the finest examples in the Museum, and some which are in their way unique, notably the splendid calyx of *Megistocrinus evansi*" (*Geol. Mag.*, 1896, p. 190). In the first collection, the fossils from the Lower Burlington limestone are provided with yellow card labels; those from the Upper Burlington limestone have red ones.

Walcott (CHARLES DOOLITTLE)

Presented impressions of Medusæ from Lower Cambrian, Mt. Granville, New York, 1900.

Walker (JOHN FRANCIS)

Presented type-specimens of Brachiopoda from the Neocomian of Upware, 1867-68; Brachiopoda from the Wenlock Shale, 1883; and Brachiopoda from the Inferior Oolite of Dorsetshire, 1891.

Warburton (T.)

Presented Pleistocene non-marine Mollusca from Moorfields, 1890.

Ward (HENRY A.)

Made plaster cast of carapace of *Glyptodon reticulatus*, obtained by exchange 1865; prepared skull of *Titanotherium* from the White River Formation of Dakota, purchased 1895.

Ward (JOHN)

Resident at Longton, Staffordshire, Mr. Ward has been occupied for forty years in collecting the fossils, especially fishes and labyrinthodonts, of the North Staffordshire Coalfield. He has always noted the exact horizons of his specimens with special care; and all are marked with a white oblong label, partly printed and bearing his name, with particulars added in his own clear handwriting. A set of 1072 selected fossils, comprising many type-specimens and other specimens described by Egerton, John Young, and Traquair, was purchased by the Trustees in 1894. Another and smaller selection was subsequently purchased by the Edinburgh Museum of Science and Art.

Ward (T. BRYAN)

See T. T. LEWIS.

Warne (Miss ELIZABETH)

Presented Oligocene fishes from Canton Glarus, 1859.

Watson (J. W.)

Presented fossil Vertebrata from the Siwalik Formation of Perim Island, 1886-87.

Westendarp (CHARLES)

Mr. Westendarp was an ivory merchant in the City of London. In 1877, he presented a few fossils collected by himself in Weimar, and, in 1879, some Post-Pliocene Gastropods from East Africa. In 1884, he made a large donation of 778 specimens of various kinds from all parts of the world. Among them may be mentioned a fine palate and mandible, with the milk-dentition, of *Elephas primigenius*, together with other vertebrate remains, from the Pleistocene of Ilford, and numerous vertebrate remains from the Pleistocene travertine of Weimar.

Westminster (Duke of)

Presented remains of Bison and Reindeer dug up in Buckingham Palace Road, 1891.

Westmoreland (J.)

Collected fossils from the Red Chalk of Hunstanton, a selection purchased through Mr. S. G. Perceval, 1900.

Weston (JOSEPH)

For many years a resident of Fenton, Staffordshire, Mr. Weston made a small but valuable collection of fossil fishes from the North Staffordshire Coalfield. The specimens were well labelled in his own handwriting, the labels being miscellaneous scraps of white paper. The whole collection, consisting of 200 vertebrate remains and 100 invertebrates and plants, was purchased in 1891.

Wetherell (NATHANIEL THOMAS) [1800-1875]

Being in medical practice at Highgate, Wetherell was attracted by the excavations for Highgate Archway, and made a large collection of the London Clay fossils from that and other localities in the north of London. As a member of the London Clay Club and a founder of the Palæontographical Society, many of his specimens were figured in the publications of the latter body. He also collected fossils from the Glacial Drift of Finchley and Muswell Hill, and this collection is now in the

Museum of Practical Geology, with the exception of a series of 50 banded flints described by S. P. Woodward (*Geol. Mag.* 1864), which were presented to the British Museum in 1865. Wetherell made many other donations to the Museum, beginning in 1833 with fossils from Highgate Archway, and continuing till 1874, when he gave many hundred portions of *Bourquetierinus* from the Chalk of Gravesend. His main collection, however, was bought through J. Tennant in 1871, making the total number of specimens received from him nearly 5000, all which have been marked "Wetherell Coll.," while many bear labels in his own handwriting. Among the more important specimens in this collection may be mentioned: a "sternum of a small wader" from the London Clay, figured by Owen ("Brit. Foss. Mammals and Birds"); teeth of *Mosasaurus* from the Chalk, figured in Mantell's "Medals of Creation"; tooth of *Ptychodus*, figured in the *Geologist*; the type of *Loriculu pulchella*, G. B. Sowerby, 1843, re-figured by Darwin (Palæontogr. Soc., 1851); some thirty type and figured specimens of London Clay Crustacea, described by T. Bell (Palæontogr. Soc., 1858), and one subsequently the type of *Squilla wetherelli*, H. Woodw. (1879); many of the types of Nautilidæ, as *Aturia zizac*, *Nautilus parkinsoni*, *N. sowerbyi*, figured by F. E. Edwards (Palæontogr. Soc.), and two *N. centralis* figured in Sowerby's "Mineral Conchology"; numerous type and figured specimens of other Eocene Mollusca described by F. E. Edwards and S. V. Wood (Palæontogr. Soc.), including a *Voluta* figured in the "Mineral Conchology," also Cypræidæ figured in the *Geological Magazine* (1865); pearl-bearing *Inoceramus* and *Gryphæa* (*Ann. Mag. Nat. Hist.*); *Terebratula semiglobosa*, figured by Davidson; six types of Polyzoa, figured by Busk (*Geol. Mag.*, 1866); the types of *Coelopleurus wetherelli* and *Ophiura wetherelli*, described by Forbes (Palæontogr. Soc., 1852); *Clionites mantelli* (*Ann. Mag. Nat. Hist.*); and flint implements from Hornsey, figured in the *Geologist*. The collection also included the 41 fossils of various kinds found in a well on Hampstead Heath, and figured by J. de C. Sowerby (*Trans. Geol. Soc.*, 1840).

Whidbey (J.)

Collected Mammalian remains from cavern of Oreston, near Plymouth, presented by Mr. Clift, 1822.

Whympner (EDWARD)

Collected Tertiary leaves in Greenland, partly presented by Mr. R. H. Scott in 1869, partly purchased in 1886. Also collected fossil Mollusca from Greenland, purchased 1886.

Wickes (W. H.)

Collected and presented remains of *Naiadites* from Rhætic, Bristol, 1900.

Wilcox (of Swanage)

Collected Reptilia, chiefly Chelonia, from the Purbeck Beds of Swanage, purchased 1853.

Willcox (JOSEPH)

Presented Pliocene Mollusca from Florida, 1889; and Miocene Mollusca from North Carolina, 1893.

Willett (HENRY)

Presented maxilla of *Iguanodon* from Wealden, Sussex, 1886; and a jaw of *Lepidotus maximus* from the Kimmeridge Clay of Shotover, 1892.

Williamson (JOHN) [1774-1877]

The cousin of William Dean, and the father of W. C. Williamson (*q.v.*), began life as a gardener, but coming under the influence of William Smith, he became a pioneer in Yorkshire geology, and was one of the original discoverers of fossil plants in the Inferior Oolite of that county, notably at Gristhorpe. The genus *Williamsonia* was named after him, and many of his specimens were described by Adolphe Brongniart. Williamson presented a small collection of these plants to the British Museum in 1829; but the main part of his collection formed the nucleus of the Scarborough Literary and Philosophical Society's museum, of which he was appointed keeper.

Williamson (WILLIAM CRAWFORD) [1816-1895]

During the latter half of his life, while occupied with researches on the organisation of the Carboniferous Flora, the well-known Professor of the Owens College accumulated a series of about 2000 microscope-slides illustrating his work. In collecting and preparing the material, he was assisted by Messrs. William Cash, James Spencer, Thomas Hick, George Wild, James Lomax, and other residents in the northern coalfields. Each specimen bears a number corresponding with a record in the descriptive MS. catalogue compiled by Prof. Williamson. The whole collection was purchased by the Trustees in 1896. He presented his collection of Yorkshire fossils, specimens of coal, and sections of Carboniferous plants to the Manchester Museum, Owens College; it contained a few specimens figured by himself and by Lindley and Hutton.

Wills (C. F.)

Collected remains of Vertebrata from the superficial deposits of Madagascar, purchased 1893.

Wills (JAMES)

Mr. Wills, a missionary in Madagascar, collected several important remains of *Aepyornithes* and *Hippopotamus*, which were purchased from him by the Museum in 1895.

Wilmer (L. WORTHINGTON)

Presented Eocene Mollusca from Dieppe, 1887.

Wilson (EDWARD)

Collected Elasmobranch teeth from the Carboniferous Limestone of Ticknall, Derbyshire, purchased 1887. Presented the type-specimens of *Necroscilla wilsoni* and *Eoscorpis anglicus*, from the Coal Measures, 1886.

Wise (JOHN R.)

Presented Oligocene shells from Brockenhurst, 1876.

Wolf (GEORGE DE)

Presented Trilobites from Mount Stephen, British Columbia, 1896.

Wood (Lieut.)

Presented Pleistocene Mammalian remains from Kotzebue Sound, Alaska, 1850.

Wood (EDWARD)

Wood was a manufacturer who lived at Richmond, Yorkshire, and amused himself by investigating the Carboniferous rocks of Swaledale, from which he gathered a valuable collection of fossils. Here he discovered a bed crowded with specimens of the crinoid described by his friend Prof. de Koninck as *Woodocrinus*, 1854. Five of the earliest known specimens were presented by Wood to the Museum in 1859. He also gave a fine slab covered with specimens of the fossil to the Carlton Club, of which he was a member. Other specimens of his collecting found their way, through the dealer J. R. Gregory, to the Museum. After Wood's death, his collection was bought by Wm. Reed, of York, who presented it, with his own large collection, to the museum of the Yorkshire Philosophical Society.

Wood (E. R.)

Presented Mammalian remains from the Gower Caves, Glamorgan-shire, 1868.

Wood (JOSEPH)

Collected Mammalian remains from a Turbary near Walthamstow, purchased 1869.

Wood (J. A.)

Presented fossil wood from Antigua, 1828.

Wood (M.)

Collected *Apiocrinus* from the Bradford Clay, purchased 1855.

Wood (SEARLES VALENTINE) [1798-1880]

From 1826 for about ten years Searles Wood lived in Suffolk and collected fossil shells from the Crag of that county and of Essex. On moving to London, he was associated with Lyell in the classification of the Tertiary formations, and continued his study of their molluscs. He was one of the members of the "London Clay Club." This led to the preparation of his monograph of the Mollusca of the Crag, the opening volume of which formed the first publication of the Palæontographical Society (1847). Subsequent volumes, with supplements, were issued at intervals down to 1882. The main work, however, was completed earlier, and in 1852 Mr. Wood presented to the Zoological Department of the British Museum his unrivalled collection of British Pliocene fossils, containing, with but two or three exceptions, all the specimens up till then described and figured in his monograph, as well as Cirripedia figured by C. Darwin, Entomostraca figured by T. Rupert Jones, and Foraminifera figured by Jones, Parker, and Brady—all in the monographs of the Palæontographical Society. A supplementary collection containing such specimens, subsequently described, as were in the author's cabinet, was presented by Mrs. S. V. Wood, junior, in 1885, to the Geological Department, to which all of the original collection preserved by the Zoological Department had in 1884 been transferred with the approval of Mr. S. V. Wood, junior. Mr. Wood also presented to the Museum in 1850 the valuable collection of vertebrate remains, including the unique jaws of *Alligator hantoniensis* and *Microchærus erinaceus*, which he had, in 1843-1845, extracted from the Eocene Freshwater beds of Hordwell Cliff, Hants, and partially figured and described in the *London Geological Journal* (1846-47). Others were described in Owen's "Reptilia of the London Clay" (Palæontogr. Soc., 1849).

Wood (SEARLES VALENTINE, JUNIOR) [1830-1884]

The son of the former, he continued his work and collection, and was corresponding with reference to the final transference of the whole to the Geological Department, when he died on December 14th, and the donation was completed by his widow, who also, in 1886, presented the collection of St. Erth fossils made for S. V. Wood by Robert Bell (*q.v.*).

Woodward (ARTHUR SMITH)

Presented Devonian fish-remains from Spitzbergen, 1891.

Woodward (BERNARD BARHAM)

Presented Pleistocene non-marine Mollusca, from the Thames Valley, Chelmsford, and Portland, 1890-91.

Woodward (HENRY)

Collected and presented Pliocene shells from Tejares, Malaga, 1860. Presented Culm Trilobites from Devonshire, 1885.

Woodward (SAMUEL)

Presented fossils from the Braunston Crag, and wood from a submerged forest on the Norfolk coast, 1828.

Worthen (AMOS HENRY) [1813-1888]

The late State Geologist of Illinois amassed a very large collection, of which the more important specimens were purchased by the State after his death. A valuable residuum, however, came into the hands of his third son, Mr. Thomas A. Worthen, of Warsaw, Ill., from whom in 1897 the British Museum acquired 499 Echinoderma, comprising 2 echinoids, 20 cystids, 85 blastoids, and 392 crinoids, mostly from the Lower Carboniferous rocks of N. America, but a few from older strata. They are for the most part accompanied by labels in Prof. A. H. Worthen's handwriting. Since Worthen himself was a student of Crinoidea, and since his collection had also been utilised by James Hall, the determinations have a special value (see F. A. Bather, "Genera and Species of Blastoidea," p. x., 1899).

Wright (BRYCE M.)

Many fossils were purchased from this dealer, including the unique skull of *Odontopteryx toliapica* from the London Clay of Sheppey, 1873.

Wright (EDWARD PERCEVAL)

Skeleton of female Irish Deer, purchased 1870.

Wright (JOSEPH)

Presented Polyzoa from the Irish Chalk, 1897.

Wright (THOMAS) [1809-1884]

A native of Paisley, Wright was for the last fifty years of his life in practice as a physician at Cheltenham, where he devoted his leisure to palæontology. In addition to thirty-two papers contributed to the *Quarterly Journal* of the Geological Society, the *Proceedings* of the Cotteswold Field Club, and the *Annals and Magazine of Natural History*, he wrote for the Palæontographical Society, monographs on

Jurassic and Cretaceous unstalked echinoderms, and on Liassic Ammonites. The collection of Mesozoic fossils amassed during these labours was purchased of the dealer, F. H. Butler, in 1887. In addition to numerous ammonites and echinoids figured by himself, it contained types and figured specimens of Edwards and Haine's *Latimæandra davidsoni*, *Axosmia wrighti*, and *Montlivaltia trochoidei*, also P. Martin Duncan's types of *Septastræa haimeii* (1867) and *Symphyllia etheridgei* (1872), all in the monographs of the Palæontographical Society.

Wylde (W. R.)

Presented skulls of *Bos longifrons* from the Irish peat-bogs, 1859.

A. S. WOODWARD.

THE DEPARTMENT OF MINERALS.

THE DEPARTMENT OF MINERALS.

I. GENERAL SKETCH.

1753-1807.

When the British Museum, established in 1753, was first opened for study and inspection on January 15, 1759, the collections had been arranged in thirty-eight rooms of Montagu House, Bloomsbury. The income from the invested funds of the Trust being small (£900 a year) and quite insufficient for the provision of a large staff of warders, it was long impossible to give to the public, indiscriminately, free access to the rooms containing objects of great intrinsic value; admission of the public was therefore by ticket, and visitors were escorted through the Museum in parties of fifteen at a time, not more than ten minutes being allowed for the inspection of the contents of any room. As only a small number of visitors (120) could be thus escorted through the Museum in a single day, previous application for tickets was necessary, and the applicant had then to wait some time, possibly weeks, until informed that the turn for admission had arrived.

Nor did the funds of the Trust allow of the provision of a large literary and scientific staff; only two officers could be provided to take care of the whole of the Natural History specimens, Animals, Plants and Minerals; for a long time these officers could be remunerated only at an extremely small rate, and their attendance was therefore required for only two hours a day on alternate days. Until the year 1807, all the officers of the Natural History Department had been zoologists or botanists, who gave no special attention to the study of minerals.

It thus came about that, until the end of the 18th century, the development and arrangement of the Mineral Collection made virtually no progress; the general collection was incomplete, preserved in closed cabinets, and classified according to a system which became out of date; the only exhibited specimens were the large ones placed on the tops of the cabinets, and some selected

lesser specimens arranged under glass in two small table-tops. And until the British Museum could be made more accessible to the public, the arrangement of additional specimens in a way which would admit of their easy inspection was not a matter of pressing importance.

But those who took a great interest in the science of mineralogy felt that there ought to be in the metropolis of the Empire a well-arranged series of the best illustrations of the mineral products of Nature ; and, in the year 1799, during the keepership of Dr. Edward Whitaker Gray, F.R.S., the Trustees took an important step towards supplying the acknowledged want by purchasing the minerals which had been collected by Mr. Charles Hatchett, F.R.S. ; in the same year, on the death of the Rev. Clayton Mordaunt Cracherode, F.R.S., who had long been one of the Trustees, a collection of well-selected mineral specimens came to the Museum by bequest. Thereupon, a small series of the Cracherode minerals was arranged under glass for facility of inspection, various other specimens were arranged in wall-cases, and the Sloane and Hatchett specimens in general were incorporated into a single systematic collection preserved in 210 drawers ; it was probably classified according to the Linnæan system.

1807-51.

<i>Assistant-keeper of Natural History</i> . . .	1807-13
<i>Keeper of Natural History</i> . . .	1813-37
<i>Keeper of Minerals (including Fossils)</i> . . .	1837-51

Charles Dietrich Eberhard König, F.R.S.

A further step was taken by the Trustees in 1807 ; in that year Mr. Charles König (formerly König), on his appointment as assistant-keeper of the Department of Natural History, was instructed to give, in the first place, the whole of his available time to the preparation of a catalogue of the systematic collection of minerals. During the following forty-four years, the care of the Minerals was entrusted to him, first as an assistant-keeper (1807-13) and afterwards as a keeper (1813-51) ; for that long space of time he was the only officer of the Museum directly concerned with the arrangement and development of the Mineral Collection. But after 1813, when he became keeper of the Department of Natural History, not only Minerals but also Plants and Animals claimed his regard ; and, though he was eventually relieved of the charge of the Recent Plants and

Recent Animals, which were assigned to special departments of Botany and Zoology respectively, he retained till his death in 1851 the keepership of not only the Minerals but also the Palæontological specimens.

During his long term of office, there were great changes as regards both the Mineral Collection in particular and the British Museum in general. In the first place, the acquisition, in the year 1810, of the fine mineral collection which had been brought together by the Rt. Hon. Charles Greville, raised the Museum collection to the first rank among the collections of the world. In the second place, satisfactory arrangements having been made with respect to the safeguarding of the various collections in the Museum, it became possible in 1811 to grant to the general public free access to the rooms on four days of the week, and to dispense with tickets of admission.

The arrangement of the minerals in glazed table-cases instead of closed cabinets now became very desirable, and the saloon of Montagu House, a large room, was placed by the Trustees at the service of Mr. König for this purpose. In the course of the next four years (1811-15), the necessary table-cases were provided and the minerals were arranged for exhibition; Mr. König adopted for their arrangement an independent modification of the Wernerian system of classification then in vogue. The table-cases were twenty-four in number and one-fourth the size of the largest in the present mineral gallery; the number of drawers had been increased to 640. In the immediately succeeding years (1816-23), the collection was further increased by the purchase of the Beroldingen, Moll and Monticelli collections, and also by numerous timely purchases of isolated specimens.

When the present building at Bloomsbury was erected in place of Montagu House to contain the large and growing collections of the British Museum, the minerals were at first arranged (1830-32) in the "Long Room" of the eastern wing; Mr. König took the opportunity of this change of position to re-classify the collection once more, and this time adopted the improved chemical scheme which had been proposed in 1824 by Prof. Berzelius. At the same time he dispersed the still very incomplete set of British minerals which he had begun to isolate from the general collection as early as the year 1816: his later experience had led him to the conclusion that it is on the whole more advantageous to have only a single systematic collection; for each mineral species the British are then in close proximity to

the foreign specimens, and directly comparable with them. In 1834 the exhibited specimens occupied sixty-one table-tops, each of them half the size of the long cases in the present gallery.

On the completion of the new building the minerals were transferred to, and re-arranged in, the rooms on its northern side (1838-44), where they remained till the removal to South Kensington in 1880.

After his promotion to the keepership of Natural History in 1813, the general demands upon Mr. König were so great that only a comparatively small portion of his time could be given to the Mineral Collection, especially in later years; it was virtually impossible for him to do any mineralogical work other than that involved in the comparison, selection, registration, arrangement and labelling of the specimens.

1851-57.

Keeper of Minerals (including Fossils),

George Robert Waterhouse, F.R.S.

During the interval 1851-57, Mr. G. R. Waterhouse, F.R.S., palæontologist, was keeper of the composite department.

As already mentioned, Mr. König, during his forty-four years of office, had been the only member of the staff directly concerned with the care of the Mineral Collection; after his death in 1851, none of his colleagues was specially qualified to develop the mineralogical section of the composite department; their interests had been, and remained, entirely palæontological. It thus came about that for six years after Mr. König's death there was no mineralogist at all on the Museum staff.

1857-80.

Keeper of Minerals,

Mervin Herbert Nevil Story-Maskelyne, M.A., F.R.S.

Assistants.

Thomas Davies	1862→
Viktor von Lang, Ph.D.	1862-64
Walter Flight, D.Sc., F.R.S.	1867→
William James Lewis, M.A.	1875-77
Lazarus Fletcher, M.A., F.R.S.	1878-80

In 1857 the Trustees were enabled to bring the unsatisfactory state of affairs to an end. In that year new arrangements

were made according to which the minerals were likewise allocated to a special department; and in August of the same year Mr. M. H. N. Story-Maskelyne, Professor of Mineralogy at the University of Oxford, was appointed keeper. It was impossible for the Trustees to provide him at once with much assistance, scientific or general. The first appointment was that of Mr. T. Davies, who was made attendant in the following February; the duties corresponding to that grade are not scientific. Although Mr. Davies, who was then in his twenty-first year, had had few educational opportunities, and was entirely ignorant of mineralogy, he had a remarkable capacity for the recognition and remembrance of the minute details of specimens, and his natural talents and his usefulness, especially at that stage of development of the mineral collection, became so manifest that in 1862 he was promoted to the scientific grade of assistant. Trained up under Mr. Maskelyne, he became a valued colleague, and gave important help in the qualitative section of the departmental work until his death in 1892, twelve years after Mr. Maskelyne had retired.

Before 1857 little importance had been assigned to the statement of localities of specimens, and there were scarcely any locality-labels with the exhibited portion of the Collection; there were no labels at all with the unexhibited specimens, many thousands in number. The latter were preserved in drawers in the Gallery and Basement of the Museum and were entirely unarranged. In the course of several years, Mr. Maskelyne, aided solely by Mr. Davies, was able to furnish locality-labels from the documents contained in the archives of the department; further, he examined, sorted and arranged into species all the unexhibited specimens, at the same time setting aside the duplicates for future disposal.

The ends of many of the cabinets were altered, glazed and fitted, thus making it possible to exhibit those mineral specimens which are too large to be placed in the table-tops.

During the keepership of Mr. Maskelyne, the Mineral Collection was completely re-arranged, the classification adopted being the crystallo-chemical system published by Prof. Gustav Rose of Berlin in 1852, instead of the purely chemical system as amended in 1847 by Prof. J. J. Berzelius and Prof. C. F. Rammelsberg, which had been on the point of being adopted by Mr. König in 1850. In addition to two large private collections, the Allan-Greg and Koksharov, numerous isolated specimens were acquired

by purchase, presentation or exchange, and incorporated with the systematic collection; special attention being given to the improvement of the series of Meteorites, which was separated by Mr. Maskelyne from the systematic mineral collection itself in 1863-64, and arranged in two small special wall-cases.

In 1857 the Museum was in no way equipped for the making of scientific research on minerals, so necessary for their accurate discrimination; there was virtually no physical apparatus, and there was no chemical laboratory at all; further, the necessity of avoiding any risk of the destruction of the Museum by fire made it impossible to allow the use of gas and to fit up laboratories, or even use a blowpipe, within the building. Yet, as early as 1861, a microscope with a revolving graduated stage and an eye-piece micrometer was constructed, under the keeper's directions, for the examination of thin sections of meteorites with the aid of polarised light; and a reflective goniometer, provided with a telescope, was specially designed for the department for use in the measurement of crystals. With these instrumental aids the beginning at least of research became possible; though at a heavy cost to Mr. Maskelyne, his eyes being soon permanently injured through the strain rendered necessary by the weakness of the available illumination. For short periods of time, Dr. V. von Lang (1862-64), now Professor of Physics in the University of Vienna, Mr. W. J. Lewis (1875-77), now Professor of Mineralogy in the University of Cambridge, and Mr. L. Fletcher (1878-80), served as assistants during Mr. Maskelyne's keepership, and gave help more especially in the crystallographic examination and in the registration of the specimens. Further, in 1867, a departmental chemical laboratory was fitted up in a private house outside the Museum precincts, and Dr. W. Flight was appointed assistant; during his tenure of office he gave much help in the chemical analysis of the specimens, but his position of isolation in an outside laboratory had the great disadvantage of preventing his close association with the general departmental work. The provision of a chemical laboratory, however, made it possible to submit specimens to a more critical examination than previously.

All the time of the departmental staff which could be spared from administrative work was devoted to chemical, goniometrical or microscopical research on the specimens.

1880-1903.

Keeper of Minerals.

Lazarus Fletcher, M.A., F.R.S. 1880→

Assistants.

Walter Flight, D.Sc., F.R.S. →1885
 Thomas Davies →1892
 Henry Maurice Platnauer, B.Sc.* 1880-83
 Henry Alexander Miers, M.A., F.R.S. † . . . 1882-95
 George Thurland Prior, M.A. 1887→
 Leonard James Spencer, M.A. 1894→
 George Frederick Herbert Smith, M.A. . . . 1897→

After Mr. Maskelyne had retired from office, a step rendered necessary by his candidature for the House of Commons, Mr. Fletcher was promoted to the vacant keepership in June, 1880. In the following month he was called upon to remove the Minerals from Bloomsbury to South Kensington, and to rearrange them in the new Natural History Museum.

Some idea of the nature of this task may be formed if it be pointed out that the cabinets of the table-cases at Bloomsbury were to be made use of in the new Gallery, but that the glazed table-tops were to be left behind; that the new table-tops were then lying on the gallery-floor at South Kensington, and had as yet no supports; that differences of illumination of the old and new Galleries, and differences of construction of the cabinets, made it necessary that the relative positions of the cabinets in the Gallery at South Kensington should be completely different from the relative positions in the Gallery at Bloomsbury; that every cabinet had for some time to be turned upside down during the process of being fitted to the new floor; that many of them had to be cut in two because of the interference of the structural columns of the Gallery, and new mahogany ends had afterwards to be made and fitted to them. Such a series of operations involves great practical difficulties when the specimens to be removed and arranged are numerous, fragile, and require to be cautiously handled, or are small portable, and of great intrinsic value, and must be kept under lock and key.

The transfer of the specimens and the fitting of the cabinets to the floor having been accomplished, the exhibited portion of the systematic collection was increased by the addition of specimens selected from the reserve series in the drawers; the

* Curator of the York Museum.

† Professor of Mineralogy at the University of Oxford.

space available for the exhibition of specimens belonging to the systematic collection being one-fourth larger than before.

Afterwards, Mr. Fletcher conceived the idea of providing both the ordinary visitor and the scientific student with the means of acquiring a systematic knowledge of the contents of the Mineral Gallery. With this end in view, he selected, in the first place, a series of specimens to serve as an introduction to the study of Meteorites, and prepared a corresponding guide-book (1881).* This introduction having been found of great service to the public, he continued the work, and by 1884 and 1895, similar series of specimens elaborately labelled, and similar guide-books, constituting introductions to the study of Minerals and Rocks respectively, were completed †; these specimens are arranged in the ten window-cases provided in the year 1883 for the northern side of the Gallery.

When the Collection was at Bloomsbury, all the labels were hand-written, and mostly of a temporary character; in the course of the re-arrangement at South Kensington printed labels have been designed and furnished for all parts of the collection, namely species-labels, locality-labels, pseudomorph-labels, and labels for the large specimens and introductory series. There are now nearly 17,000 printed labels exhibited in the Gallery.

All the vertical glazed fronts of the table-cases, formerly fixed, were in 1881 made removable, and the ends of the cases have been provided with new fittings.

Fittings have likewise been made for the wall-cases, which have themselves been provided since 1880, and specimens have been selected and mounted for exhibition therein. One of the wall-cases now contains a beautiful series of polished slabs of Ornamental Stones; most of the others contain large specimens of minerals and rocks, specially selected and mounted.

At Bloomsbury no space was available for the exhibition of rock-specimens; an elaborately labelled series of typical rock-specimens has now been arranged in the eleven window-cases on the southern side of the Gallery.

The Pseudomorphs, at one time arranged in six of these cases, have been transferred to three additional table-cases provided for

* *Introduction to the Study of Meteorites, with a List of the Meteorites represented in the Collection.* 6d.

† *Introduction to the Study of Minerals, with a Guide to the Mineral Gallery.* 6d.

Introduction to the Study of Rocks. 6d.

the Pavilion, at the eastern end of the Gallery ; the Isolated Crystals and Crystal Models, at one time in some of the window-cases, have been transferred to two wall-cases at the western end of the Gallery.

Since 1880, the selection, registration, incorporation, labelling and arrangement of the specimens, and the formation and cataloguing of the Departmental Library, have made great demands on the staff of the Department, but time has been nevertheless found for research on the specimens. For this purpose the Department has been gradually equipped with an excellent set of the most modern apparatus necessary for the physical and goniometrical investigation of minerals, and good illumination has been provided for use with the instruments ; the chemical laboratory is no longer isolated from the Museum, but has been fitted up in the building itself.

As the purchase of entire systematic collections of minerals generally involves the acquisition of many duplicate and inferior specimens, only few such collections have been acquired by the Trustees ; of these the more important have been the Hatchett and the Cracherode Collections (1799), the Greville Collection (1810), the Monticelli Collection (1823), the Allan-Greg Collection (1860), and the Koksharov Collection (1865).

Most of the mineral specimens in the Museum Collection have been singly selected, each on its own merits, after direct comparison with specimens already acquired ; a collection of specimens offered for presentation or sale to the Trustees is thus generally represented in the Museum Collection by a merely miscellaneous set of specimens, and in many cases by only a single one.

All the collections and isolated specimens acquired since the foundation of the Museum have been incorporated together to form a single General Collection ; in the course of this incorporation many thousands of duplicates and inferior specimens have been set aside, and afterwards either presented to local museums and institutions, or exchanged to mineral collectors and foreign museums for specimens more useful to the British Museum, or have been otherwise disposed of.

Since the year 1837, when the General Register of specimens was begun in each Department of the Museum, the mineral specimens have been systematically numbered and entered therein ; the General Register thus gives a complete and

continuous record of the growth of the Collection since that year. In the case of the Allan-Greg collection (1860), all the specimens had been numbered and catalogued before the collection became the property of the Trustees, and their entry in the General Register was unnecessary.

Further, all the mineral specimens acquired before 1837 have likewise been numbered and entered in the General Register, unless they bear affixed labels referring to special registers or other documents preserved in the Department—for instance, the Sloane, Cracherode, Durazzo, Beroldingen, Heuland, or Aylesford Catalogues.

The General Register of specimens preserved in the Mineral Department extended on December 31, 1903, to seventeen volumes of foolscap size with 86,807 entries; but of these the earlier entries (1-26,480) correspond, not solely to minerals, but also to palæontological specimens: after the death of Mr. König, in 1851, specimens belonging to the latter kind were entered in a special register, and in 1857 assigned to a special department. The number of entries in the General Register is only a rough approximation to the number of specimens acquired for the Museum; for in some cases two or more specimens belonging to the same species or group have been entered under a single number, especially where the material is fragmental. Indeed, where there is little or no individuality, as is generally the case with minerals, the number assigned to the quantity of specimens may be without real importance: for example, a material may be studded with thousands of crystals and yet, being in one piece, it is reckoned as a single specimen; if it be diminished in size by the removal of the material connecting the crystals, it may become, not part of a specimen, but thousands of specimens, each more or less different from the others.

The exhibited specimens (1903) are placed on upwards of 16,000 separate trays, each carrying one or more specimens; further, there are 2400 exhibited specimens for which no trays are required. The total number of drawers, almost all containing specimens, is 4276.

Affixed to every specimen in the Mineral Department is a number referring in most cases to the above-mentioned "General Register," and in the remaining cases to one or other of a set of Lists or Catalogues. Every specimen, exhibited or unexhibited, is provided with a printed or manuscript label.

2. CHRONOLOGICAL ACCOUNT OF THE PRINCIPAL ACCESSIONS TO THE DEPARTMENT OF MINERALS (1753-1903).

The specimens preserved in the Mineral Department are conveniently discriminated into three series, briefly and conveniently designated MINERALS, ROCKS and METEORITES.

SERIES A.—MINERALS.

The Collection of Minerals is arranged in two Divisions, namely, the Introductory Series and the Systematic Collection; to the latter several small collections are auxiliary:—

Div. I. *The Introductory Series*, which comprises some of the best of the mineral specimens, is exhibited in the first four window-cases (I-IV) of the Gallery. The specimens have been selected, arranged and labelled, to serve as an *Introduction to the Study of Minerals*.

Div. II. *The Systematic Collection*.—The finest and the most instructive specimens of the Systematic Collection are exhibited in forty-one table-cases (1-41) in the Gallery; most of the remaining specimens are in the drawers of the table-cases and wall-cases of the Gallery and Pavilion. Many of those specimens which are too large to be exhibited in the positions proper to them as members of series are exhibited in the lower parts of the table-cases of the Gallery, or are mounted on separate tables or pedestals, and are then adjacent to the corresponding specimens of smaller size; but most of the finer large specimens are brought together as a special collection and are exhibited in the wall-cases (H, J, K) of the Pavilion.

A complete list of the mineral species and varieties represented in the Collection, with a reference to the location of the specimens in the Gallery, is published under the title of *The Student's Index to the Collection of Minerals*.

The following collections are auxiliary to the Systematic Collection :—

- 1a. A series of *Isolated Crystals* and *Models of Crystals*, illustrative of crystalline form ; part is exhibited in two wall-cases (D, E) of the Gallery.
- 1b. A series of *Slices of Crystals* prepared for examination by transmitted polarised light ; they are preserved in the drawers of a special cabinet.

Some of the crystals and slices of crystals are those of native products (minerals) ; others are those of illustrative products in the formation of which human action has intervened, and which are therefore generally called "artificial."

2. A collection of *Pseudomorphs* ; the best and most instructive specimens are exhibited in three table-cases (44, 45, 46) in the Pavilion ; the remaining specimens are in the drawers of those cases.
3. A series of specimens illustrative of the *Forms of Silica*, arranged and described in 1884 by Professor John Ruskin ; exhibited in table-case 47 in the Pavilion.
4. A collection of *Enclosures*, illustrating the enclosure of one mineral by another ; exhibited in a portion of table-case 42 in the Gallery.
5. A small set of so-called "*Artificial Products*" identical in their essential characters with, or closely allied to, recognised mineral species ; some are exhibited in a portion of table-case 42 in the Gallery.
6. A collection of polished slabs of *Ornamental Stones* ; exhibited in a wall-case (A) of the Corridor, near the entrance to the Gallery.
7. The most interesting of the *Recent Accessions* are kept together for a time, and before being incorporated with the Collection are exhibited in table-case 43 in the Gallery.

It may be added that mineral species are defined, not by means of type-specimens, but by means of numerical quantities which specify the crystalline form and chemical composition of the substance ; figures of actual mineral specimens have thus little or no classificatory value and are rarely published.

CHRONOLOGICAL LIST (1753-1903) REFERRING TO
SERIES A.—MINERALS.

1753.

Of the four collections which in 1753 were brought together to form the British Museum, only one, that of Sir Hans Sloane, Bart., F.R.S. [1660-1753], of London, contained natural history specimens. In the year 1687, Sir Hans (then Dr.) Sloane had sailed to the West Indies as physician to the Governor of Jamaica (the Duke of Albemarle), and during his fifteen months' stay there had collected natural history specimens, more especially plants. Evelyn's Diary records a visit made to this collection on April 16, 1691. Later, in 1702, he inherited the miscellaneous collections which had been gathered together by his friend, Mr. William Courten [1642-1702], of London, long known as Mr. Charlton (or Charleton). During his long residence and travels on the Continent, Mr. Courten, a grandson of the first Earl of Bridgewater, had availed himself of his opportunities for obtaining remarkable specimens; according to Evelyn's Diary, the collection was, in 1686, so extensive as to occupy ten rooms of the Middle Temple, and the museum was then a place of frequent and fashionable resort. Sir Hans Sloane was Secretary of the Royal Society for nineteen years [1693-1712], and President for fourteen years [1727-1741]; like Mr. Courten, he had many opportunities of becoming acquainted with, and acquiring, natural products of special interest. In 1718, on the death of Mr. James Petiver [1658-1718], of London, Sir Hans Sloane purchased the extensive natural history collections which had been formed by that indefatigable naturalist. In 1748, the Sloane Museum, at that time in the Manor House, Chelsea, was of such importance that it was honoured by a visit from the Prince and Princess of Wales; the Prince, on leaving, is reported to have expressed to Sir Hans Sloane the opinion that it would conduce to the benefit of Learning, and redound to the great honour of Britain, if the grand collection could be established for public use.

The Sloane mineral specimens, however good they may have

been for the time in which they were collected, were later replaced by others which better illustrated the characters of minerals. Neither Mr. Courten nor Sir Hans Sloane had made a special study of minerals; in their time the interest of a mineral specimen was generally limited to the yield of valuable metal or to the utility as an ornamental stone. For it was not till twenty years after the death of Sir Hans Sloane that crystalline form was discovered to be a specific character of unorganised matter; till then, attention had rarely been paid, in the collecting of mineral specimens, either to excellence of crystalline development or to variety of crystalline form. Further, oxygen being still undiscovered, chemistry had not yet entered upon its modern phase. The sharp definition of mineral species and their scientific arrangement were alike impossible.

The point to which mineralogy had attained during the lifetime of Sir Hans Sloane himself is well illustrated by the scheme of classification adopted for the mineral section of his manuscript catalogue, the making of which was begun in the early years of the eighteenth century, and was continued till his death. The minerals were distributed into the following classes: (1) Precious Stones; (2) Metals; (3) Ambers, Bitumens, Ambergris, &c. (including Sulphur); (4) Salts, Earths, Clays; (5) Talcs, Micas; (6) Crystals; (7) Flints, Fossils, &c. The assignation of the specimens to these classes was very imperfect, and there was much overlapping; that of Precious Stones, for example, included Bristol Stones, Agates, Touchstone, Loadstone, many Flints, and also Stones of Curious Shapes. In the will of Sir Hans Sloane it was expressly stated that the catalogue had been prepared in great haste. The total number of entries in the mineral section, which occupies three volumes, is 8649. Other volumes contain an elaborate set of indexes.

Most of the Sloane specimens now preserved in the Collection are worked articles (cups, bowls, boxes, knife-handles, &c.) of agate, jasper, rock-crystal, and other varieties of quartz. Mention may also be made of faceted pebbles of amethyst and aquamarine from India, a cut turquoise, two specimens of amber, and the first described specimen of columbite.

1758.

A mocha-stone, set in an enamelled ring: presented by the Duke of Noja.

1765.

A polished, oval slab of brown and yellow jasper : presented by the Earl of Exeter.

1777.

Two large, polished slabs of labradorite, showing change of colour on change of incidence of the light ; from Nain, Labrador : presented by the Rev. Benjamin La Trobe.

1782.

Malachite from China : presented by Mr. John Duncan.

1790.

Atacamite ("copper sand") from Atacama, Chili : presented by the Abbé Rochon.

1797.

Two mamillary masses and a polished slab of malachite ; from the Urals : presented by the Rev. Robert Nares, F.R.S.

1799.

Owing to the smallness of the income of the Trust, there was little money available for the purchase of specimens of any kind, natural or artificial, and in fact no purchases of minerals were made between 1753 and 1799. In the meantime the science of mineralogy had made immense progress ; more especially, the importance of crystalline form as a character of minerals had received general recognition. Further, there had been great activity in the principal mining districts of Great Britain, such as Cornwall, Derbyshire and Lanarkshire. Splendid specimens had been obtained from the English and Scotch mines, and yet the minerals were scarcely represented in the National Collection. Under these circumstances the Trustees, notwithstanding the poverty of the Trust, seized an opportunity offered to them, and, acting on a report made to them by the Rt. Hon. Charles Greville, F.R.S., Mr. Philip Rashleigh, and the Rt. Hon. Sir Joseph Banks, F.R.S., purchased the mineral collection of Mr. Charles Hatchett, F.R.S. [1765-1847], of London, still remembered by chemists for his discovery of the metal to which he

gave the name columbium. The collection, which consisted of nearly 7,000 specimens, mostly small, was particularly useful in its representation of British minerals. Further, Mr. Hatchett, in the course of his travels on the Continent and by means of correspondence, had obtained many good illustrations of foreign minerals. From Count Apollon de Moussin Poushkin, for example, he had received a large number of Russian specimens, a manuscript list of which is preserved in the Department.

In the same year, 1799, on the death of the Rev. Clayton Mordaunt Cracherode, F.R.S. [1730–1799], of London, who had been elected a Trustee of the Museum in 1784, a fine collection of books, prints, coins, medals, gems, minerals and shells came to the Trustees by bequest. The mineral specimens were many of them choice examples; as may be estimated from the fact that, though only 838 in number, their cost to the collector was nearly twice as much as was paid by the Trustees for the far more extensive collection which had been formed by Mr. Hatchett. There is a detailed manuscript catalogue of the collection. Special mention may be made of:—polished slabs of labradorite and lapis lazuli; crystallised specimens of blende, tetrahedrite, argentite, pyrrargyrite and heulandite.

1800.

Iron-pyrites with blende, copper-pyrites, pearl-spar, calcite and quartz, all crystallised; from Chili: presented by Mr. Archibald Menzies.

1807.

A crystal of boracite, in gypsum, from Lüneburg, Hanover: presented by Mr. Joseph Planta, F.R.S.

1809.

189 specimens of Peruvian minerals, chiefly ores; a manuscript list of them, received at the same time, is preserved in the Department: presented by Lord Grenville.

1810.

The Rt. Hon. Charles Greville, P.C., F.R.S. [1749–1809], of London, son of the Earl of Warwick and nephew of Sir William Hamilton, died intestate in the year 1809, and it became

necessary to realise his property for division among his next-of-kin. The property included a collection of minerals which he had been forming for more than 30 years, and had arranged in his house at Paddington Green. Its nucleus was the collection of Baron Ignaz von Born [1742-1791], of Prague, described by Baron Born in the *Lithophylacium Bornianum*, and purchased from him by Mr. Greville before the second part of that catalogue was published [1775]. To this was probably added the collection of the Marchese Ippolito Durazzo [1754-1818], mineralogist and afterwards botanist, of Genoa; of this collection an undated manuscript Latin catalogue is preserved in the Department; the epoch of formation of the collection and catalogue is roughly indicated by the system of classification, which was the one published by A. F. Cronstedt in 1758. Count de Bournon, long a political refugee from his own estates and country, obtained employment in connection with several mineral collections in England, one of them being that of Mr. Charles Greville. He was occupied with its arrangement from 1794 to 1806, and during the same interval of time gave advice as regards further acquisitions. The Greville collection eventually became the finest assemblage of minerals which had been seen in England, and was declared by English mineralogists and Count de Bournon in 1810 to be in most parts equal, and in many parts superior, to the best Continental collections. A sum of money was specially voted by Parliament for the purchase of the collection, numbering about 14,800 specimens, for the British Museum. The faceted precious stones of Mr. Greville did not form part of this purchase, but had been disposed of separately: but the precious stones in their native condition were well represented in the collection; there were fine series of crystallised diamond, ruby, sapphire, emerald, topaz and rubellite.

More especially may be mentioned the following:—

Rubellite: the largest and most remarkable crystal, or parallel growth of crystals, in this and probably in any other collection. It was given by the King of Ava to Colonel (then Major) Michael Symes when the latter was on an Embassy to that country in 1795.

Corundum: a rough deeply worn piece which had long been used in a family of Indian lapidaries.

Atacamite: crystallised; from South America.

Datolite from Arendal, Norway.

Euclase: an isolated crystal from Minas Geraes.

Aragonite: a unique group of large crystals from the neighbourhood of Glasgow.

Calcite: a group of twinned and simple crystals from Derbyshire.

Cromfordite: two very fine crystallised specimens, of extreme rarity, and, until 1851, the best that were known: from Derbyshire.

Apatite: a group of extremely fine, large crystals from Russia. This occurrence appears to be represented in Russian collections by only two, rather smaller, specimens.

Various volcanic minerals from Guadaloupe, West Indies; an amber necklace, supposed to be of Roman workmanship, found in Lincolnshire: presented by Sir Joseph Banks, Bart. F.R.S.

1811.

Chrysoberyl from Greenfield, New York: presented by Prof. Archibald Bruce.

Copalite ("Highgate resin") from Highgate, Middlesex: presented by Mr. Snow.

Platinum from South America: presented by Mr. F. Bauer.

1812.

A specimen of surturbrand (lignite) from Iceland: presented by Sir Joseph Banks, Bart., F.R.S.

1813.

A small nugget of gold, weighing 57 grains (3·69 grams), from County Wicklow: presented by Sir Joseph Banks, Bart., F.R.S.

1814.

Silver in calcite, from Peru: presented by Don Hipólito Unánue.

1815.

Iridosmine with platinum, gold and magnetite, from the Urals: presented by Dr. W. H. Wollaston, F.R.S.

The library and the Natural History collections of Baron K. E. von Moll [1760-1838], of Salzburg and Munich, were purchased; many minerals of great scarcity and beauty, especially from Salzburg and Tyrol, were thus added to the Collection.

1816.

The collection of Baron F. C. von Beroldingen [1740–1798], of Hanover and the Palatinate, was purchased in 1816, many years after his death, from his nephew Count J. I. von Beroldingen, the Würtemberg Minister in London: the specimens, about 14,000 in number, are small in size and of mediocre quality, but had at the time of acquisition a certain amount of interest by reason of their localities, or as illustrating the ideas developed by the collector in his published works—more especially his “*Bemerkungen auf einer Reise durch die Pfälzischen und Zweybrückschen Quecksilber-Bergwerke*,” published in 1788. A manuscript German catalogue in two volumes is preserved in the Department.

1817.

Berzelianite, ytrocercite, and other recently-discovered Swedish minerals: presented by Professor J. J. Berzelius.

Yttrotantalite from Sweden: presented by Sir Joseph Banks, Bart., F.R.S.

Wavellite from Devonshire: presented by Dr. William Wavell.

1818.

Amber, graphite, and other minerals from Greenland: presented by Captain (afterwards Sir) Edward Sabine, F.R.S.

A waterworn mass of copper, brought by Mr. Samuel Hearne from a spot 29 or 30 miles S.S.E. of the mouth of the Coppermine river, British North America, in 1771: presented by the Hudson Bay Company.

Melilite, and other Vesuvian minerals: presented by Earl Compton (afterwards Marquess of Northampton).

1819.

Three specimens of ilvaite from Elba: presented by Mr. Marryat.

1820.

Calcite and copper-pyrites from the Ecton mine, Staffordshire: presented by the Duke of Devonshire.

Several specimens of graphite, showing the mineral in different kinds of matrix, from Borrowdale, Cumberland: presented by Mr. Henry Banks.

1821.

Hatchettite from Merthyr Tydvil, S. Wales : presented by Mr. Charles Hatchett, F.R.S.

1822.

Silver in calcite, from Chili : presented by Mr. Alexander Caldeleugh.

Two polished slabs of jadeite from China : presented by Sir Abraham Hume, Bart.

1823.

Aragonite from Buckfastleigh, Devonshire : presented by Prof. William Buckland, F.R.S.

A large collection of Vesuvian products, upwards of 2000 in number, brought together by Dr. Teodoro Monticelli [1759–1846], for many years Professor of Chemistry at Naples, was purchased in 1823 ; the results of the study of these products are given in Monticelli and Covelli's *Prodromo della Mineralogia Vesuviana*, 1825. A manuscript list of the specimens of the collection, in the handwriting of Prof. N. Covelli, is preserved in the Department. Many of the best specimens of crystallised Vesuvian minerals now in the Museum came as part of the Monticelli collection.

1824.

Gold with aikinite, in quartz, from Beresovsk, Urals : presented by Mr. J. M. Raikes.

1825.

Brilliant, greenish-yellow crystals of pyromorphite on the matrix, from Wheal Alfred, Cornwall : presented by Mr. J. Taylor, F.R.S.

A series of cut and polished precious and other ornamental stones, in which class of material the Museum Collection was then very deficient, was purchased from Mr. H. C. G. von Struve [1772–1851], at the time when he was Russian Minister-Resident at Hamburg. The specimens, which numbered about 300, included two large star-sapphires, weighing 88 and 30 carats (nearly 18 and 6 grams) respectively, and also specimens of ruby, topaz, hyacinth, chrysolite, chrysoprase, cat's-eye, precious opal, carnelian, chalcedony, onyx, amethyst, rock-crystal with mineral enclosures, and amber.

1826.

Zeolites, opal, &c., from the Faroe Islands: presented by Sir Walter C. Trevelyan, Bart.

Boracite from Lüneburg: presented by Captain W. Müller.

1827.

Hatchettite from Merthyr Tydvil, S. Wales: presented by Mr. Hill.

Minerals from Ceylon: presented by the Rev. George D'Oyley, D.D.

1828.

A collection of choice specimens from the Harz Mountains, the large groups of crystals of calcite and of pyrargyrite being especially fine: presented by His Majesty King George the Fourth.

1829.

Garnet, magnetite and tourmaline, from Haytor, Devonshire: presented by Mr. Shirley Woolmer.

Native gold from Beresovsk, Urals, and some other Russian minerals: purchased.

1830.

Staurolite from Brittany; kermesite from Saxony; epidote from Norway: purchased.

1831.

Malachite from Linares, Spain: presented by Captain S. E. Cook (afterwards Widdrington), R.N., F.R.S.

Topaz from Brazil; rhodochrosite from Saxony; chessylite from Chessy, France; apatite from St. Gotthard: purchased.

1832.

Childrenite from Crinnis mine, Cornwall: presented by Mr. T. H. Holdsworth.

Hæmatite on lava from Vesuvius: presented by the Marquess of Northampton.

Scorodite on limonite from Antonio Pereira, Ouro Preto, Brazil: purchased.

A large crystal of rose-coloured corundum from St. Gotthard: purchased.

1833.

Turquoise from Persia : presented by Sir Gore Ouseley, Bart.

Worked articles of agate and heliotrope : presented by Lady Frances Trail.

Two faceted green tourmalines : purchased.

A suite of specimens of alluvial and other gold, brought together by Captain G. F. Lyon, R.N., during his stay in the principal gold districts of Brazil : purchased.

1834.

A very large mass of aluminite from Newhaven, Sussex : presented by Dr. G. Mantell, F.R.S.

After the death, in 1832, of the Dowager Countess of Aylesford, her extensive collection of minerals came into the possession of Mr. Henry Heuland [1777?—1856], mineral dealer of London, from whom many choice specimens selected from the Aylesford collection were purchased by the Trustees in 1834: the two-volume manuscript catalogue of this collection is now preserved in the Department. At various times other fine specimens were purchased from Mr. Heuland, particularly from his private collection.

1835.

Diallage, cuprite, and other minerals from Cornwall : presented by Mr. Ashurst Majendie.

Chessylite from Chessy, France : purchased.

Native copper from the Bank mines, Siberia : purchased.

Amethyst from Porcura, Transylvania : purchased.

Native gold from Sweden and Transylvania : purchased.

1836.

Well crystallised specimens of cerussite, calamine (large green rhombohedra from Chessy), beryl, mimetite, gold, argentite, rutile, barytes, idocrase, apatite, and fluor : presented by Mr. R. Simmons, F.R.S.

Large crystals of sulphur on the matrix ; from Conil, Cadiz, Spain : purchased.

1837.

Total acquisitions 378,* including :—

Magnesite, and other minerals from India : presented by Dr. P. M. Benza.

Gold, diamond, and other minerals from Brazil : presented by Dr. José Estevão Cliffe.

Apatite from St. Gotthard and Ehrenfriedersdorf ; rhodochrosite from Schneeberg, Saxony ; copper-glance from Cornwall ; chessylite : purchased.

1838.

Total acquisitions 250, including :—

Twenty-four Sicilian ambers : presented by Mr. G. Gravine.

Witherites from Northumberland : presented by Mr. Robert Stokoe and Mr. Benjamin Leadbeater.

A large mass of crystallised pyromorphite, of a rich green colour, from Hofsgund, Baden : purchased.

A large twin crystal of quartz (rock-crystal), grouped with simple crystals on the matrix, from La Gardette, Dép. Isère, France : purchased.

1839.

Total acquisitions 194, including :—

A series of Egyptian minerals and ores : presented by Sir J. Gardner Wilkinson, F.R.S.

A very large dodecahedral crystal of almandine, from Fahlun, Sweden : purchased.

Various American minerals : purchased.

Native silver, from Norway : purchased.

1840.

Total acquisitions 183, including :—

Crystallised vivianite in the interior of an Irish deer's tooth, from Ireland : presented by Sir Philip de M. G. Egerton, Bart., F.R.S.

A crystal of diamond in the matrix, from Brazil : purchased.

* The General Register of the new acquisitions for the Museum was begun in 1837.

1841.

Total acquisitions 158, including :—

A cup made of jadeite : presented by Lieut.-Col. H. Burney, to whom it had been given by the King of Ava.

Crystallised native silver from Kongsberg, Norway : purchased.

Faceted stones (diamond, ruby, cymophane, sapphire, zircon, topaz and dichroite) : purchased.

Euclase, ilmenite, magnetite and topaz, from Brazil : purchased.

Group of crystals of black tourmaline and white apatite from Bovey Tracey, Devonshire : purchased.

1842.

Total acquisitions 209, including :—

Harmotome, strontianite, &c., from Strontian : presented by Sir Robert H. Inglis, Bart., F.R.S.

Tscheffkinite from the Ilmen Mountains, Russia : presented by Mr. H. Christie.

Various minerals and rocks, from India : presented by Dr. P. M. Benza.

Indian idol, carved in sapphire : purchased.

1843.

Total acquisitions 126, including :—

Carnelian, jasper and chalcedony, from India : presented by Mr. S. Law.

Mispickel, allanite and gadolinite, from Norway : presented by Prof. B. M. Keilhau and Prof. T. Scheerer.

Fine crystals of linarite on the matrix, from Roughten Gill, Caldbeck, Cumberland : purchased.

1844.

Total acquisitions 205, including :—

Three specimens of greenockite : presented by the Earl of Cathcart.

A table with stand, made of cannel coal from the Wemyss mine, Fifeshire : purchased.

Two isolated crystals of euclase from Brazil : purchased.

Greenish-yellow serpentine pseudomorphous after large crystals of olivine ; from Snarum, Norway : purchased.

1845.

Total acquisitions 93, including :—

A large specimen of beekite from Devonshire : presented by the Marquess of Northampton.

Mellite, a group of crystals on lignite from Thuringia : presented by the Earl of Aylesford.

A large crystal of apatite from Hammond, New York : purchased.

A group of pseudomorphous crystals (haytorite), from Haytor mine, Dartmoor, Devonshire : purchased.

1846.

Total acquisitions 238, including :—

A group of pale flesh-red rhombohedra of chabazite (acadialite) on the matrix, and a group of brick-red rhombohedra of chabazite with stilbite in a rock-cavity ; both from Wasson's Bluff, Bay of Fundy, Nova Scotia : presented by Mr. W. G. Lettsom.

1847.

Total acquisitions 333, including :—

An enormous group of large, colourless, prismatic crystals of gypsum from Reinhardtsbrunn, Gotha, Germany : presented by H.R.H. the Prince Consort.

About 100 specimens of amber from the Prussian coast, many of them enclosing insects : purchased.

A very pretty specimen of chalybite, pseudomorphous after fluor, consisting of a hollow cube of chalybite, in the centre of which is a mound of tarnished copper-pyrites surmounted by divergent prisms of white quartz ; from Virtuous Lady mine, Tavistock, Devonshire : purchased.

1848.

Total acquisitions 186, including :—

About 120 mineral specimens bequeathed by Mrs. Ann Tattenall.

1849.

Total acquisitions 189, including :—

Calcite—a large group of small, yellowish, acute rhombohedra grouped in twin position ; from Bermuda : presented by Mr. Thomas Baring.

1850.

Total acquisitions 240, including:—

Two groups of dark-green crystals of epidote on the matrix, from Traversella, Piedmont, Italy: presented by Mr. W. G. Lettsom.

Two specimens of fluor ("The Couttet rose-fluors") from Switzerland: presented by Prof. John Ruskin.

A fine group of pink crystals of apophyllite from Samson mine, Andreasberg, Harz: presented by the Marquess of Northampton.

Sixty-two crystals of diamond: purchased.

Spodumene, a large crystal, from Chesterfield, Massachusetts: purchased.

1851.

Total acquisitions 167, including:—

A very large group of crystals of galena, with rhombohedra of calcite and some blende, from Great Laxey mine, Isle of Man: presented by the Proprietors of the mine.

Graphite, a mass weighing 32 lb. ($14\frac{1}{2}$ kilograms): presented by Messrs. Pilcher and Sons.

1852.

Total acquisitions 62, including:—

A small gold nugget, weighing 516 grains (33·4 grams), from Queen Charlotte's Island, British Columbia: purchased.

1853.

Total acquisitions 67, including:—

A group of crystals of witherite from Fallowfield mine, Hexham, Northumberland: purchased.

1854.

Total acquisitions 73, including:—

Several crystals of parisite from Muso, Colombia: presented by Mr. E. W. Marks.

A colourless, transparent, waterworn mass, weighing 12 lb. 13 oz. (5·812 kilograms), of topaz with cleavage-surfaces,

probably from Ceylon ; before being recognized to be topaz, it had for some time been in use as a door-weight in Fleet Street, London : purchased.

A large specimen of chessylite, encrusted with large crystals ; from Chessy, Dép. du Rhône, France : purchased.

1855.

Total acquisitions 163, including :—

Jade from New Zealand : presented by Sir George Grey, K.C.B.

Greenland minerals, including fine columbites : presented by Mr. J. W. Tayler.

1856.

Total acquisitions 200, including :—

A large prismatic crystal of quartz, with sharply defined negative crystals and a large cavity enclosing liquid and a bubble : purchased.

1857.

Total acquisitions 112, including :—

Specimens of jarrowite : presented by Prof. Richard Owen, F.R.S., and Mr. J. Hodgson.

Argentite from Freiberg, Saxony : purchased.

1858.

Total acquisitions 723, including :—

Zeolites, and other minerals from Scotland and the Faroe Islands : presented by Mr. P. Dudgeon.

The "Latrobe" gold nugget, well crystallised in cubes and weighing 23 oz. Troy (717 grams) ; from McIvor Mount, Victoria ; raised May 1st, 1853, in the presence of His Excellency C. J. Latrobe, the Governor of the Colony : purchased.

Brilliant crystals of heulandite encrusting the matrix ; from Berufjord, Iceland : purchased.

A group of large, black octahedra of spinel, with crystals of diopside, phlogopite and calcite ; from Amity, Orange County, New York : purchased.

A series of silver-bearing minerals from Chili : purchased.

1859.

Total acquisitions 3185, including :—

A magnificent group of white and colourless, lamellar crystals of cerussite, many of them twinned; from Logylas mine, Aberystwith, Cardiganshire: presented by Mr. J. Taylor, F.R.S.

Orthite from Hitterö: presented by Mr. R. P. Greg.

Brilliant twinned crystals of bournonite on crystals of quartz, a large specimen; from Herodsfoot mine, Liskeard, Cornwall: purchased.

A large series of crystals, 2624 in number, brought together by Dr. A. Krantz [1809-1872] of Berlin and (after 1850) Bonn; it contained specimens of very rare minerals such as euclase and wagnerite, and was rich in series of feldspars, hemimorphite, augite, chrysolite, beryl, phenakite, sapphire, zircon: purchased.

1860.

Total acquisitions 9944, including :—

An extensive series of beautifully crystallised zeolites (apophyllite, stilbite, scolecite, &c.), frequently aggregated together to form very large groups; from the railway cuttings in the Syhadree Mountains, Bombay: presented in 1860 and 1861 by Mr. James Berkley, Chief Engineer of the Great Indian Peninsula Railway.

Sloanite, larderellite, caporicianite, and other minerals from Italy: presented by Cavaliere Sloane.

The Allan-Greg Collection, consisting of about 9000 specimens: purchased. Its formation had been begun by Mr. Thomas Allan, F.R.S. [1777-1833], of Edinburgh, and it included a set of Greenland minerals, brought together by Mr. Charles Giesecke during seven years' residence in that country; some of the Greenland specimens were purchased about the year 1808. In the enrichment of the collection and in its arrangement Mr. Allan was much assisted by Dr. (afterwards Prof.) Wilhelm von Haidinger, more especially while the latter was resident in Edinburgh [1823-1826]; much of the material referred to in Haidinger's earlier papers belonged to the Allan Collection. After Mr. Allan's death the collection was purchased by Mr. R. H. Greg; and, still later, it was added to by his son, Mr. Robert P. Greg, then of Norcliffe Hall, near Manchester. The chief value of the collection to the British Museum consisted

in its magnificent series of British minerals, of which, if the Cornish minerals be excepted, it was the finest collection known; the *Manual of the Mineralogy of Great Britain and Ireland*, by R. P. Greg and W. G. Lettsom, published in 1858, was based on that material. The collection was also peculiarly rich in Norwegian minerals, and the series of chessylite and idocrase were extraordinarily good. The specimens had been catalogued and numbered before the collection was purchased by the Trustees.

A series of Italian minerals: purchased.

A large mass of native copper from Lake Superior: purchased.

A selection of specimens from the collection of Prof. Nuttall, including a very fine group of crystals of kyanite from Massachusetts: purchased.

1861.

Total acquisitions 1472, including:—

Eudialyte, sapphirine and allanite from Greenland: presented by Mr. J. W. Tayler.

Forty specimens of zeolites from Nova Scotia: presented by Dr. A. C. Cogswell.

A series of specimens from the Campbell collection. In 1861, on the death of Mr. James R. Campbell, of Cheltenham, the Trustees were permitted to make a selection from the well-chosen specimens, upwards of 3000 in number, which had been brought together by him; as a result nearly 500 specimens were purchased in this and the following year, and further, three remarkable specimens were presented by his widow; one of the latter being a radiating group of crystals of erythrite, of a rich crimson colour, on a matrix of crystallised quartz, from Schneeberg in Saxony.

Very large crystals of rutile from Lincoln County, Georgia: purchased.

Two hundred specimens from the collection of Mr. William Nevill: purchased.

A large group of twinned prismatic crystals of calcite, with smaller acicular crystals, on the matrix, from Wheal Wrey, Liskeard, Cornwall: purchased.

A group of large, opaque, ash-grey crystals of spodumene in quartz, from Huntington, Massachusetts: purchased.

A polished sphere of perfectly clear and flawless quartz (rock-crystal), from Japan: purchased

1862.

Total acquisitions 1074, including :—

Numerous so-called artificial crystals, prepared by Dr. Carl von Hauer, of Vienna, and shown in the Austrian Court of the Exhibition which was held in London in the year 1862 : presented in the same year.

A series of specimens of turquoise from Wadi Maghara, Arabia Petraea : presented by Major C. Macdonald.

A sharply developed, perfectly transparent and colourless, cube of salt (halite) on the matrix, from Wieliczka, Galicia, Austria : presented by the Austrian Government.

A large mass of green turquoise with smooth, round surfaces, and a large crystal of ruby spinel : purchased.

Fine crystals of diopase on the matrix, from Kirghiz Steppes, Siberia : purchased.

1863.

Total acquisitions 595, including :—

Specimens of chalcedonic minerals from Uruguay : presented by Mr. W. G. Lettsom.

A very large, water-worn and polished mass of jade, weighing 1156 lb. (524 kilograms), from Battugol, Irkutsk, Siberia : purchased.

A group of large cubes of fluor of a bluish-green colour, with zonal bands of colour ; some faces are partly coated with pyrites ; from Menheniot mines, Cornwall : purchased.

1864.

Total acquisitions 617, including :—

A large mass of graphite from the Alibert mine, near Battugol, Irkutsk, and other Siberian specimens : presented by Mr. Iv. P. Alibert.

A twinned crystal of Iceland spar, bounded by numerous faces, and weighing about 3 cwt. (150 kilograms) : purchased.

A group of large cubes of greenish fluor, some faces being encrusted with crystals of calcite ; from Menheniot mines, Cornwall : purchased.

A group of twinned cubes of argentite ; [this specimen, having been protected from the light, has retained its bright lustre] ; from Himmelfahrt mine, Freiberg, Saxony : purchased.

1865.

Total acquisitions 3620, including :—

Several fine large specimens :—a polished mass of Iceland spar ; harmotome from Strontian ; chessylite from Chessy ; a long branch of crystallised native copper from Lake Superior ; celestite from Sicily : presented by Prof. John Ruskin.

A collection (about 3250 specimens) formed by General N. I. Koksharov [1818–1893], of St. Petersburg. This purchase enriched the Museum with an admirable series of Russian, and, in particular, of Siberian minerals, the finest specimens of which are rarely offered for sale beyond the borders of the Russian Empire. The collection had served as material for the valuable series of Memoirs published by General Koksharov under the title of *Materialien zur Mineralogie Russlands* [1853–1891]. The collector, being at the same time Director of the Mining School at St. Petersburg, had exceptional opportunities afforded to him. Worthy of special mention are :—several large crystals of phenakite, isolated or in the matrix, from the emerald mines, Ekaterinburg, Urals ; and a suite of six magnificent, isolated crystals of topaz, smoky brown in colour and transparent, from the Urulga river, Nertschinsk, Transbaikal. Other species well represented are alexandrite, euclase, emerald, tourmaline, perofskite, idocrase, columbite, crocoite and apatite.

1866.

Total acquisitions 668, including :—

Small, yellowish-green, acicular crystals of pyromorphite, thickly encrusting the matrix ; from Roughten Gill, Caldbeck, Cumberland : by exchange.

A large specimen of pharmacosiderite with numerous crystals ; from Redruth, Cornwall : purchased.

Rhombohedra of lilac-blue calcite, certain faces being encrusted with quartz crystals ; from Tankerville mine, Shelvel, Shropshire : purchased.

Gold ores from Borneo : purchased.

1867.

Total acquisitions 778, including :—

A large octahedron, with artificially polished faces and rounded edges, of ruby spinel, from Ava, Burma : purchased.

Fine crystallised specimens of barytocalcite, from Alston, Cumberland : purchased.

Two large faceted phenakites, perfectly clear and colourless, and other specimens of cut gem-stones from Russia : by purchase and exchange.

1868.

Total acquisitions 690, including :—

A large mass of salt (halite) with a reddish tinge, crystallised in cubes on the surface ; from Salt Range, Punjab, India : presented by Mr. E. L. Brandreth.

Beryl, a large faceted "aquamarine," from Siberia : purchased.

Groups of very large twinned crystals of bournonite, from Cornwall : purchased.

140 specimens of minerals, chiefly Scotch : purchased.

1869.

Total acquisitions 624, including :—

A remarkable parallel growth of crystals of rubellite, of a deep colour from Ava : presented by Mr. C. S. J. L. Guthrie.

A nugget of platinum, weighing 1350 grains (87·5 grams), from Nijni-Tagilsk, Urals · presented by H.I.H. the Duke of Leuchtenberg.

A very large mass of brown crystals of pyromorphite, on the matrix, from Braubach, Nassau : purchased.

Collection of specimens of native gold from Wales : purchased.

About one hundred specimens of Swedish and Norwegian minerals : purchased.

A very large crystal of black quartz, from Tiefen Glacier, Switzerland : purchased.

Fine, isolated crystals of epidote, from Knappenwand, Untersulzbachthal, Salzburg : by purchase and exchange.

1870.

Total acquisitions 548, including :—

Crystals of sapphire and zircon, from Siam : presented by Mr. Henry Alabaster.

A nugget of native gold, weighing 1 oz. 145·5 grs. Troy (40·53 grams), from the washings at Helmsdale, Sutherland : purchased.

Fine calcites, fluellites, and other minerals, from Cornwall : purchased.

1871.

Total acquisitions 509, including :—

Childrenite and several other mineral specimens: presented by Mrs. Atkins from the collection of her father, Mr. J. G. Children, F.R.S.

Twenty specimens of Iceland spar: purchased.

Amethyst, small hexagonal prisms, with trigonal terminations, thickly covering the surface of the matrix; from Guanaxuato, Mexico: purchased.

Olivine—a large faceted peridot, of a rich green colour: purchased.

A magnificent series of specimens of cuprite, in various forms, from Cornwall: purchased.

1872.

Total acquisitions 529, including :—

Various Canadian minerals: presented by Prof. H. A. Nicholson, F.R.S.

A large mass of gold-quartz—portion of a rich quartz-lode; from San Rafael, Costa Rica: presented by the Monte del Aquacata Mining Company.

Large crystals of manganite on the matrix, with a little white barytes, from Ilfeld, Harz: purchased.

Fine crystals of epidote, from Knappenwand, Untersulzbachthal, Salzburg: purchased.

1873.

Total acquisitions 1080, including :—

The collection of mineral specimens which had been brought together by Mr. Richard Bright [1754–1840], of Bristol, and had been added to by his second son, Mr. Benjamin Heywood Bright [1787–1843]: it was presented to the Museum by Mr. Benjamin Bright [? –1900], only son of the latter. British minerals, especially celestite, göthite, agate, &c., from the neighbourhood of Bristol, are well represented; of foreign minerals, special mention may be made of red corundum from St. Gotthard, and large crystals of idocrase from Egg, Norway.

Various American minerals: by exchange.

A very large, dodecahedral crystal of magnetite: purchased.

Diamond crystals, isolated and in the matrix, with a series of minerals found accompanying them, from the Diamond Fields of South Africa: purchased.

1874.

Total acquisitions 535, including :—

Two large, isolated crystals of parisite from Muso, Colombia : presented by Mr. Gustav Lehmann.

Wulfenite, friable mass of brilliant, honey-yellow lamellæ, from Tecoma mine, Lucin District, Utah : by exchange.

A large specimen of bromlite, covered with small crystals, from Bromley Hill, Alston, Cumberland : purchased.

Fine specimens of zeolites from Bombay : purchased.

Seventy specimens, chiefly zeolites, from Bergen Hill, New Jersey : purchased.

A very large, cavernous and botryoidal, mass of sard from India : purchased.

1875.

Total acquisitions 585, including :—

A series of specimens of cassiterite from New England, New South Wales : presented by the Rev. G. F. Wright.

A large nugget of platinum, weighing 3 lb. 320 grains Troy (1142·5 grams), from the Urals : purchased.

Minerals from Spain, and gold ores from the Philippines : purchased.

One hundred specimens of Mexican minerals, including :— calcite, group of white, sharply defined scalenohedra, from Valenciana mine, Guanaxuato ; and quartz pseudomorphous after calcite, from Guanaxuato : purchased.

Quartz, group of prismatic crystals of colourless rock-crystal, from La Gardette, Isère, France : purchased.

A large, white, opaque crystal of analcite, from Fassathal, Tyrol : purchased.

A flawless, polished sphere of Iceland spar (calcite) : purchased.

200 specimens of Peruvian minerals : purchased.

1876.

Total acquisitions 598, including :—

Specimens of corundum and associated minerals from North Carolina and Pennsylvania ; also various other minerals from the United States : presented by Dr. Joseph Leidy.

Crystallised specimens of blödite from the Mayo salt mines, Punjab, India : presented by Dr. H. Warth.

A remarkable specimen of quartz ("cotterite") with a peculiar pearly lustre, from Rock Forest, County Cork : presented by Miss G. E. Cotter.

Large, white, hexagonal prisms of aragonite, on the matrix ; from Herrengrund, Hungary : by exchange.

An enormous, scalenohedral crystal of calcite (Iceland spar), partly coated with bunches of stilbite ; the crystal, which is upwards of two feet (60 centimeters) in length, has been cleaved and mounted to show the wide separation of the two images resulting from the double refraction of the mineral ; from Rödefjord, Iceland : purchased.

Large, parallel group of orthoclase crystals, virtually forming a single one, with smoky quartz, on graphic granite ; from Alabashka, Mursinsk, Urals : purchased.

About fifty specimens of Swedish minerals, including large crystals of pyrosmalite on the matrix : purchased.

1877.

Total acquisitions 905, including :—

A magnificent group of large, transparent, scalenohedral crystals of proustite, which, having been protected from the light, have retained both their colour and their transparency ; from Chañarcillo, Chili : presented by Mr. H. Ludlam.

Thirty specimens, mostly from Brazil ; including quartz, pyrrhotite and chalybite, from San Juan del Rey mine, Minas Geraes : presented by the Hon. R. Marsham-Townshend.

About sixty specimens of Spanish minerals : by exchange.

About forty specimens of Vesuvian and Sicilian minerals : purchased.

About one hundred specimens of Swedish minerals : purchased.

Fluor, an extremely large mass of "Blue John" ; from Derbyshire : purchased.

Very brilliant, transparent crystals of pale-greenish apatite, from Knappenwand, Untersulzbachthal, Salzburg ; purchased.

Beryl ("aquamarine"), a long hexagonal prism with basal plane, transparent, but much flawed, and a group of topaz crystals, stained yellowish, with smoky quartz ; from Adun-Tschilon, Nertschinsk, Transbaikal : purchased.

1878.

Total acquisitions 417, including :—

Specimens of the newly discovered minerals eosphorite, triploidite, dickinsonite and lithiophilite; from Branchville, Connecticut: presented by Prof. E. S. Dana.

Coquimbite, erythrite, &c., from Chili: presented by Dr. Joseph Leidy.

A large, pale-coloured, opaque, altered crystal of enstatite from Bamle, Norway: purchased.

Krennerite from Transylvania: purchased.

A large crystal of yellow corundum from Ceylon: purchased.

A beautiful octahedron of pink fluor on smoky quartz, from Switzerland: purchased.

1879.

Total acquisitions 395, including :—

Senarmontite, several large colourless octahedra on the matrix, from Mine d'Hamimad, Constantine, Algeria: presented by Prof. A. L. O. L. Des Cloizeaux.

A large series of Indian minerals: transferred from the India Museum, London.

Sixty-five specimens, mainly zeolites and borates, from Nova Scotia: purchased.

Films of gold on one face of a large crystalline mass of bismuth; from Bolivia: purchased.

Magnetite—very brilliant dodecahedra, on the matrix; from Nordmark, Sweden: purchased.

1880.

Total acquisitions 281, including :—

Bright crystals of columbite from Standish, Maine; and various other minerals: presented by Prof. N. Story-Maskelyne, F.R.S.

Various minerals from New Mexico, including turquoise and gold: presented by Mr. F. M. Army.

A large, isolated, tabular crystal of apatite, of a pale-violet colour in one part; from Schwarzenstein, Zillertal, Tyrol: purchased.

A dark-green crystal of enstatite from Bamle, Norway: purchased.

1881.

Total acquisitions 259, including:—

A group of crystals of uranocircite, of a beautiful siskin-green colour, on the matrix; from Falkenstein, Saxony: presented by Prof. A. H. Church, F.R.S.

Crystals of xanthoconite, with clear crystals of proustite; from Mina Dolores I., Chañarcillo, Chili: purchased.

A large group of sulphur crystals from Girgenti, Sicily: purchased.

Spodumene, a fine faceted "hiddenite," of a rich green colour: purchased.

A splendid group of large, transparent crystals of barytes, from Prizibram, Bohemia: purchased.

Numerous crystals of tourmaline (rubellite) projecting from the surface of a block of granite; from San Piero, Elba: purchased.

1882.

Total acquisitions 488, including:—

Leadhillite, hemimorphite, &c., from Leadhills and Wanlockhead; amazon stone from Tongue, Sutherlandshire; and other minerals: presented by Mr. Patrick Dudgeon.

Chlorargyrite, native silver, argentopyrite and other minerals, from Chili: presented by Mr. F. A. Eck.

Chlorargyrite, a large pure mass, from Florida mine, Taltal, Atacama, Chili: presented by Mr. George Hicks.

A large, colourless, transparent, doubly terminated crystal of quartz, from Switzerland: presented by Mr. C. S. Bement.

A splendid specimen of coralloidal aragonite (flos ferri) from Eisenerz, Styria: purchased.

An isolated crystal (a well-developed rhombic dodecahedron) of lapis lazuli; from Bokhara: purchased.

A very fine, twinned crystal of copper-pyrites from Freiberg, Saxony: purchased.

1883.

Total acquisitions 272, including:—

A very fine crystal of pyrrhotite from Morro Velho, Minas Geraes, Brazil: presented by Mr. F. Tendron.

A very large crystal of colourless quartz from Madagascar: purchased.

A group of large, white crystals of adularia from Berg Scopi, Graubünden, Switzerland: purchased.

Fluorescent amber, cut and polished, from Catania, Sicily purchased.

1884.

Total acquisitions 535, including :—

Forty gem-stones—ruby, spinel, sapphire, etc., mostly faceted : presented by Mr. J. Brukowsky.

About fifty specimens of agate and chalcedony : presented by Prof. John Ruskin.

A very large group of prismatic crystals of stibnite from Mount Kosang, near Saiyo, Island of Sikok, South Japan : purchased.

Amethyst—many pyramidal crystals encrusting the matrix ; from Uruguay, South America : purchased.

Fine crystals of emerald from Stony Point, North Carolina : purchased.

1885.

Total acquisitions 495, including :—

Dawsonite, phlogopite (a large crystal), meneghinite, etc., from Canada : presented by Dr. B. J. Harrington.

Large, dark, scalenohedral crystals of calcite, enclosing copper-pyrites ; from Ecton mine, Leek, Staffordshire : presented by the Proprietors of the mine.

A very large, simple crystal of staurolite from Brittany : presented by Mr. C. Seidler.

Tetrahedrite crystals, coated with tarnished copper-pyrites, on the matrix ; from Herodsfoot mine, Cornwall : purchased.

Brilliant crystals of black smoky quartz, on granite ; from Tavetschthal, Graubünden, Switzerland : purchased.

1886.

Total acquisitions 568, including :—

Thirty-seven specimens of Indian minerals : presented by Mr. H. B. Medlicott, F.R.S.

Copper minerals from Mammoth mine, Utah : presented by Mr. R. Pearce.

A large slab of golden-yellow cat's-eye (quartz) and another of blue, asbestiform crocidolite, from the Asbestos Mountains, South Africa : presented by Mr. Sydney Cowper.

Group of green, fluorescent cubes of fluor on the matrix ; from Weardale, Durham : purchased.

Brilliant, tabular crystals of wulfenite, of a rich vermilion colour, on the matrix ; from Arizona, U.S.A. : purchased.

1887.

Total acquisitions 920, including:—

Several fine large masses of precious opal in the matrix; from Queensland: presented by Prof. N. Story-Maskelyne, F.R.S.

The "Colenso" diamond, a large yellowish octahedron, with rounded edges and triangular markings on the faces, weighing 130 carats (27 grams); and the "Edwardes" ruby (corundum): presented by Prof. John Ruskin.

Several deep-red crystals of almandine, embedded in mica-schist; from Fort Wrangell, Alaska: purchased.

Brilliant, greenish-blue crystals of apatite, implanted on large crystals of orthoclase and quartz, on granite; from Luxullian, Cornwall: purchased.

1888.

Total acquisitions 260, including:—

A group of brilliant crystals of apophyllite of a very pale-purplish shade of colour; from Guanaxuato, Mexico: purchased.

Five large, isolated, pyramidal crystals of scheelite from Rothlaue, Gutannen, Switzerland: purchased.

A large group of crystals of witherite from Fallowfield mine, Hexham, Northumberland: purchased.

A large group of numerous prismatic crystals of calcite, with one twinned crystal of much larger size, on a matrix of red iron-ore; from Egremont, Cumberland: purchased.

1889.

Total acquisitions 402, including:—

A large crystal of black tourmaline, with sharp termination; from Madagascar: presented by the Rev. J. Wills.

Various American minerals: presented by Colonel J. Willcox.

An aggregate of large, green cubes of fluor, from Muscolonge Lake, Jefferson County, New York: purchased.

A selection (58 specimens) of faceted precious stones (sphene, spinel, sapphire, zircon, etc.), from Mr. J. R. Gregory's collection: purchased.

1890.

Total acquisitions 586, including:—

Specimens of awaruite (terrestrial nickel-iron) and serpentine, from New Zealand: presented by Prof. G. H. F. Ulrich.

A fibrolite hatchet from France: presented by Mr. C. Seidler.

Asbestos, a mass of long, white fibres, from Valtellina, Lombardy, Italy : presented by the United Asbestos Company.

A pale-blue, doubly terminated crystal of topaz, from Alabashka, Mursinsk, Perm, Russia : purchased.

1891.

Total acquisitions 458, including :—

A large crystal of sphene, from Risør, Norway : presented by Mr. A. L. Collins.

Various minerals from Ceylon, one of which was afterwards found to be a new species and named baddeleyite : presented by Mr. J. Baddeley.

A fine, large group of white, prismatic crystals of laumontite, on the matrix ; from Felső-Csertes, Déva, Hunyad, Transylvania : purchased.

1892.

Total acquisitions 504, including :—

A large mass of botryoidal malachite from Copper Queen mine, Bisbee, Arizona : presented by Dr. James Douglas.

Silicified wood, a polished section of a tree trunk ; from Holbrook, Apache County, Arizona : purchased.

A large, isolated, prismatic crystal of diopside from Hull, Quebec, Canada : purchased.

Small, brilliant crystals of black blende, scattered over crystalline quartz ; from Alston, Cumberland : purchased.

A very fine group of large, purple cubes of fluor, the crystals being in part transparent and showing zonal bands of colour ; from Weardale, Durham : purchased.

Large cubes of galena on the matrix, with small, curved rhombohedra of pearl-spar and small crystals of blende and quartz ; from Alston, Cumberland : purchased.

Clusters of large, brilliant crystals of sulphur on the matrix ; from Girgenti, Sicily : purchased.

1893.

Total acquisitions 1023, including :—

550 specimens, chiefly from Cornish mines, selected from the extensive collection of Mr. J. C. Williams, of Caerhays Castle, Cornwall, a collection made by his father and grandfather ; presented by Mr. J. C. Williams. Of these may be specially

mentioned:—a very large mass of cerussite, as delicate silky needles, from Pentire Glaze mine, Padstow, Cornwall; and a unique specimen of Cornish spangolite.

Crystals of selenite, of extraordinary size, from Wayne County, Utah: presented by Dr. J. E. Talmage.

A large crystal of colourless, transparent blödite, very symmetrically developed on all sides; from Warcha Mine, Salt Range, Punjab, India: presented by the Director of the Geological Survey of India.

150 specimens, chiefly American, selected from the collection made by Colonel Joseph Willcox, of Philadelphia: purchased.

A large, isolated crystal of dolomite, with smaller crystals in twin position; from Switzerland: purchased.

1894.

Total acquisitions 407, including:—

Thirty-six specimens, mostly English, selected from the mineral collection made by his mother, Lady Cust: presented by Mr. L. Cust.

Quartz, a large “butterfly-twin”; probably from Brazil: purchased.

A polished slab of pink, mottled thulite; from Lexviken, Trondhjem, Norway: purchased.

A large, square prism of scapolite, with basal plane and four obliquely placed pyramid-planes; from Brække, Bamle, Norway: purchased.

A set of rare tellurides, including several fine crystals, from Cripple Creek, Colorado, brought together by Mr. Milton Moss: purchased (1894–1901).

Copper, cerussite, marshite, silver, embolite, anglesite, wulfenite and chessylite, all in fine examples; from Broken Hill, New South Wales: purchased.

1895.

Total acquisitions 606, including:—

Bröggerite from Moss, Norway: presented by Prof. W. C. Brögger.

Mackintoshite from Texas, and ruby from North Carolina: presented by Mr. W. E. Hidden.

Fifty-eight crystals, which had belonged to the collection of Prof. Gustav Rose of Berlin: purchased.

An extensive collection of crystals of calcite, being part of the material used by Prof. F. Sansoni for his memoirs on the crystallography of that species: purchased.

Finely crystallised specimens of lorandite and realgar, from Allchar, Macedonia: purchased.

1896.

Total acquisitions 412, including:—

Crystallised masses and groups of chessylite and malachite from Copper Queen mine, Bisbee, Arizona: presented by Dr. James Douglas.

A large, regularly developed cube of purple fluor, from Weardale, Durham: presented by Miss Caroline Birley.

A large suite of crystals of edingtonite, several of large size, from Böhlet, Sweden: purchased.

A well-crystallised specimen of cromfordite from Monte Poni, Sardinia: purchased.

1897.

Total acquisitions 896, including:—

Specimens of gold ores from the various gold-fields of Australia: presented by Mr. J. C. F. Johnson.

New minerals (tripuhyite, derbylite and lewisite) from Brazil: presented by Dr. E. Hussak.

A specimen consisting on one side of yellow, scalenohedral crystals of calcite, and on the other of small curved rhombohedra of pink dolomite together with cubes of galena and small tetrahedra of copper-pyrites; also a large, isolated, scalenohedron of yellow calcite; both from Joplin, Jasper County, Missouri: purchased.

A large, isolated, twinned crystal of adularia, from Switzerland: purchased.

A crystal of erubescite from Frossnitz-Alpe, Pregratten, Tyrol: purchased.

A selection (200 specimens) from the collection formed by Bergrath F. C. L. Koch; chiefly from the Harz: purchased.

1898.

Total acquisitions 255, including:—

A large suite of very delicately crystallised specimens of aragonite from the Sterkfontein caves, Barnett, Transvaal: presented by Mr. H. P. Thomasset.

Sapphires and spinels, from Siam: presented by Mr. H. Warington Smyth.

A reticular mass of twinned crystals of cerussite, and other minerals, from Broken Hill, New South Wales: purchased.

A long, hexagonal crystal of phenakite, with terminal planes; from Kragerö, Norway: purchased.

Large crystals of cryolite, grouped together in parallel position, and other minerals from Greenland: purchased.

1899.

Total acquisitions 551, including:—

Dodecahedral crystals of argyrodite, encrusting a mass of pyrargyrite; from Colquechaca, Potosi, Bolivia: presented by Mr. Avelino Aramayo.

A large specimen of andorite, encrusted with numerous large crystals; from Itos Atocha mine, Oruro, Bolivia: presented by Mr. Thomas J. Hooper.

A collection (forty-six specimens) of Bolivian minerals, including angelite, stannite, andorite, wolfsbergite: presented by Sir W. Martin Conway.

A specimen of barytes, consisting of seven large, brownish crystals showing zonal growth, on a matrix of dolomite dusted over with red hæmatite; from Goose Green mine, Frizington, Cumberland: purchased.

An isolated twin of rock-crystal (quartz) from Japan: purchased.

A large, sharply defined, hexagonal prism of green, opaque beryl, from Moss, Christiania Fjord, Norway: purchased.

1900.

Total acquisitions 443, including:—

About one hundred representative minerals from Japan: presented by Dr. T. Kochibe, Director of the Geological Survey of Japan.

A large, scalenohedral crystal of proustite, with a smaller crystal intergrown, of a rich red colour and nearly transparent; from Chañarcillo, Chili: purchased.

A large, isolated, twinned crystal of orthoclase, of a grey colour; from Tvedestrand, Nedenäs, Norway: purchased.

A group of cubes of purple fluor, encrusted with brilliant bipyramidal crystals of quartz, on a matrix of dolomite; from Weardale, Durham: purchased.

A suite of brilliant crystals of crocoite, of long prismatic habit, some isolated, others confusedly grouped together; from Dundas, Montagu County, Tasmania: purchased.

Stolzite, a large piece of matrix encrusted with crystals of two kinds:—(a) scattered crystals, of pyramidal habit with basal plane, and of a red colour; (b) a crystalline crust of thin, tabular crystals of a yellow colour; from Broken Hill, New South Wales: purchased.

1901.

Total acquisitions 311, including:—

Rare minerals from Greenland: by exchange.

Fine beryls and rubellite, from Russia: purchased.

Fine suite of calcites and barytes, from Cumberland: purchased.

A crystal of topaz, weighing 137 lb. (62 kilograms); from Sætersdalen, Norway: purchased.

1902.

Total acquisitions 603, including:—

A collection of gold tellurides and other gold ores from Western Australia: presented by the Government of Western Australia and various Western Australian companies.

A large, yellow crystal of barytes from Dalmellington mine, Frizington, Cumberland: purchased.

Calaverite with coloradoite, petzite and tennantite, on a matrix of greenish sericite-schist; from the Associated Gold Mines of Western Australia, Kalgoorlie, W. Australia: purchased.

Albite, quartz and sphene—a large group of crystals on the matrix; from Ofenhorn, Binnenthal, Switzerland: purchased.

An aggregate of very large, white crystals of aragonite, with some sulphur, from Sicily: purchased.

A fine group of large, tabular crystals of epidote of a dark green colour, with small crystals of quartz; from Prince of Wales Island, Alaska: purchased.

A suite of tourmalines from California: purchased.

1903.

Total acquisitions 324, including:—

A remarkable crystal of wollastonite, in great part changed into opal, from Santa Fé, Chiapas, Mexico: presented by Mr. H. F. Collins.

A magnificent crystal of kunzite, a lilac-coloured variety of spodumene, from California: presented by Major A. H. Davis.

An extremely fine group of large rhombohedra of rhodochrosite from Colorado: presented by Mr. C. S. Bement.

Fine specimens of cerussite from Broken Hill, New South Wales: presented by Mr. A. L. Lane.

An enormous crystal of gadolinite, weighing $21\frac{1}{2}$ kilograms, from Sweden: purchased.

A series of about 55 specimens, selected from Mr. T. Hohmann's private collection of South American minerals, including fine crystals of atacamite, caracolite, paralaurionite, schwarzembergite, and specimens of teallite: purchased.

A remarkable suite of fine, doubly-terminated and parti-coloured crystals of tourmaline, from California: purchased.

A fine suite of large twinned crystals of cinnabar, from Central China: purchased.

SERIES B.—ROCKS.

The Collection of Rocks is arranged in three main Divisions:—

- Div. I. *The Introductory Series*, exhibited in six window-cases (V–X) of the Gallery. The specimens have been selected, arranged and labelled, to serve as an *Introduction to the Study of Rocks*.
- Div. II. *The Systematic Collection*, exhibited in twelve window-cases (XI–XXII) of the Gallery. The specimens have been selected, arranged and labelled, to serve as examples of the kinds and varieties of Rocks.
- Div. III. *The Topographical Collection*, preserved in drawers. The specimens are arranged according to localities.

Those specimens which are too large to be placed in the positions proper to them as members of the series, for instance, basaltic columns, are mounted on separate pedestals or are placed in two wall-cases (F, G) of the Gallery.

Further, an auxiliary collection of polished slabs of marbles and other ornamental rocks is exhibited in a wall-case (A) of the corridor.

CHRONOLOGICAL LIST (1753–1903) REFERRING TO
SERIES B.—ROCKS.

1764.

A table-top inlaid with Vesuvian products: presented by the Earl of Exeter.

1768, 1769, 1772 and 1779.

Specimens of lavas, and a series of large polished sections of volcanic bombs from the dolomitic breccias of Monte Somma, Vesuvius: collected and presented by Sir William Hamilton, F.R.S.

1811.

A collection of about fifty specimens of schists, slates, limestones, &c., from the North and East Coast of Australia, made by Captain M. Flinders, R.N., of H.M.S. *Investigator*, in 1801-3: presented by the Lords Commissioners of the Admiralty. [See Flinders, *Voyage to Terra Australis*, London, 1814.]

1816.

A small collection of gneisses, schists, &c., made by Dr. C. Smith and Mr. Tudor at the mouth of the Congo in 1816: presented by the Lords Commissioners of the Admiralty. [Described by Mr. C. König in Captain Tuckey's *Narrative of an Expedition to explore the River Zaire, usually called the Congo*, appendix vi, pp. 486-488, London, 1818.]

1820.

A series of nepheline-syenites and other rocks from Sierra Leone, collected by Dr. H. Nicoll: presented by Earl Bathurst.

1821.

Rock-specimens collected in the Expeditions to the Polar Regions: presented by the Lords Commissioners of the Admiralty. [A description of the rock-specimens, collected by Sir W. E. Parry during the expedition of 1819-20, was given by Mr. C. König in the *Quart. Journ. Sci.*, 1823, vol. xv, pp. 11-22.]

1823.

Rock-specimens collected by Sir W. E. Parry during his last voyage to the Polar Seas: presented by the Lords Commissioners of the Admiralty.

A large and representative series of volcanic products (lavas and ashes, &c. of various eruptions) from Vesuvius, Ischia and the Campi Flegrei: collected by, and purchased from, Prof. T. Monticelli.

1825.

A collection of about 70 specimens of granites, sandstones, limestones, basalts, &c., made by Captain Hugh Clapperton in the Soudan : presented by the Lords Commissioners of the Admiralty. [They were described by Mr. C. König in Denham and Clapperton's *Narrative of Travels and Discoveries in Northern and Central Africa in 1822-24*, appendix xxiii, p. 247, London, 1826.]

1826.

A collection of about fifty specimens of granites, dolerites, &c., made by Lieut. (afterwards Rear-Admiral) H. W. Bayfield, R.N., during a survey of Lake Superior : presented by the Lords Commissioners of the Admiralty.

1827.

Two specimens of flexible sandstone from Itacolumi Mountain, Minas Geraes, Brazil : presented by Viscount Strangford.

1829.

A collection of about thirty specimens of granites, quartzfelsites, sandstones, &c., from the Sinai Peninsula : collected and presented by Lord Prudhoe (afterwards Duke of Northumberland). [A list of a duplicate set of these rocks, presented to the Royal Dublin Society by the Duchess of Northumberland, and a description of the journey from Cairo into Arabia Petræa, during which the specimens were collected, are given in *Journal of the Royal Dublin Society*, 1859, vol. ii, pp. 161-175.]

1837.

Total acquisitions 147,* including :—

A collection of rock-specimens from India (chiefly from the Nilgiri Hills) : presented by Dr. P. M. Benza.

About forty specimens of serpentines, dolerites, etc., from the shores of the Gulf of St. Lawrence, sent by Lieut. Bowen, R.N. : presented by H.R.H. the Duke of Sussex.

* The General Register of new acquisitions for the Museum was begun in 1837.

1839.

Total acquisitions 1800, including :—

A series of 979 specimens of variegated clay from London and the vicinity : presented by Mrs. Swan.

About sixty specimens of schists, serpentines, breccias, etc., from Egypt and Arabia Petræa : collected and presented by Sir J. Gardner Wilkinson, F.R.S.

1841.

Total acquisitions 305, including :—

About 300 specimens of phonolitic and basaltic lavas from the Canary Islands : collected and presented by Mr. P. Barker Webb. [See P. Barker Webb and S. Berthelot, *Histoire Naturelle des Îles Canaries*, Paris, 1839.]

1842.

Total acquisitions 205, including :—

A series of polished slabs of marbles from Derbyshire and Staffordshire : purchased.

1844.

Total acquisitions 702, including :—

The rock-collections made by the Antarctic Expedition of 1839-43 under Sir James Clark Ross, including specimens from Kerguelen Land, Cape Horn, Cockburn Island, South Victoria Land, Tasmania, the Little Island of Trinidad, St. Paul's Rocks and Falkland Islands : presented by the Lords Commissioners of the Admiralty. [The specimens collected during the three voyages southwards into Antarctic regions have been described by Mr. G. T. Prior in *Mineralogical Magazine*, 1899, vol. xii, pp. 69-91 ; and those from the Little Island of Trinidad in *Mineralogical Magazine*, 1900, vol. xii, pp. 317-323.]

1845.

Total acquisitions 341, including :—

A collection of about 300 specimens of granites, schists, sandstones, limestones, etc., from South Australia : presented by the Governor, Sir George Grey, K.C.B.

1846.

Total acquisitions 45, including :—

A collection of about forty specimens of schists and slates from the Himalayas : presented by the Earl of Aylesford.

1848.

Total acquisitions 81, including :—

A collection of about fifty specimens of rocks and minerals from north Australia : presented by Sir T. L. Mitchell.

Nineteen specimens of rocks and minerals from Aden : presented by the Directors of the East India Company.

1851.

Total acquisitions 45, including :—

Rock-specimens collected by the Arctic Expedition of H.M.S. *Pioneer* : presented by the Lords Commissioners of the Admiralty.

1855.

Total acquisitions 139, including :—

Limestones, schists and slates from the mountain ranges of western Persia, and of volcanic rocks from Lake Van, etc., collected and presented by Mr. W. K. Loftus. [See *Quart. Journ. Geol. Soc.*, 1851, vol. vii, p. 263 ; 1854, vol. x, p. 464 ; and 1855, vol. xi, p. 247.]

1868.

Total acquisitions 356, including :—

A series of volcanic rocks of Scotland and the north of England : purchased.

1869.

Total acquisitions 336, including :—

A series of basalts and phonolitic trachytes containing riebeckite, collected by Dr. W. T. Blanford, F.R.S., during the Abyssinian Expedition of 1868 under Sir Robert Napier : presented by Dr. Blanford. [See Blanford, *Observations on the Geology and Zoology of Abyssinia*, London, 1870 ; also G. T. Prior, *Mineralogical Magazine*, 1899, vol. xii, pp. 92-95.]

About 200 specimens of volcanic rocks from Ireland, collected by Mr. P. Doran: purchased.

A series of about 100 specimens of schists and slates, and phonolitic volcanic rocks containing riebeckite and ægirine, collected by Dr. W. Schimper in the neighbourhood of Adowa and Axum, Abyssinia: purchased. [They have been described by Mr. G. T. Prior in *Mineralogical Magazine*, 1899, vol. xii, pp. 253–273.]

1870.

Total acquisitions 121, including:—

A collection of about 100 specimens of volcanic bombs and lavas from the Laacher See: purchased.

1872.

Total acquisitions 973, including:—

About 900 miscellaneous rock-specimens (chiefly volcanic), from German localities (Rhenish Prussia, Baden, Hesse, Nassau, Saxony): purchased.

1873.

Total acquisitions 303, including:—

About 200 specimens of dolerites, schists, conglomerates, etc., from South Africa (Namaqualand, Transvaal, etc.), collected by Mr. E. J. Dunn: by exchange.

A supplementary collection (about 100 specimens) of volcanic products from the Laacher See: purchased.

1874.

Total acquisitions 288, including:—

A small collection of rock-fragments from Mull and Arran, illustrating his papers in the *Quart. Journ. Geol. Soc.*, on the Tertiary eruptive rocks of the Western Islands of Scotland: presented by Prof. J. W. Judd, C.B., F.R.S.

About fifty specimens of basaltic rocks from Fifeshire and Skye: presented by Mr. Thomas Davies.

A collection of "Exeter trap" and other volcanic rocks (about thirty specimens) from Devonshire: presented by Mr. W. Vicary.

A collection of about thirty-five specimens of volcanic rocks from the Charnwood Forest district, Leicestershire: by exchange.

1875.

Total acquisitions 264, including :—

A collection of rock-specimens illustrating the geology of Newfoundland : by exchange.

A collection of Swedish rocks, including specimens of the porphyries of Elfdalen : purchased.

1876.

Total acquisitions 1208, including :—

About 150 specimens of basaltic lavas, etc., from the Island of Rodrigues, collected by Prof. I. Bayley Balfour, F.R.S., during the "Transit of Venus" expedition of 1874-75 : presented by the Lords Commissioners of the Treasury. [These rocks were described by Prof. N. S. Maskelyne, in *Philosophical Transactions*, 1879, vol. clxviii, pp. 296-301.]

A collection of about 40 specimens of andesitic rocks from Hungary : presented by Prof. J. Szabó.

A large series (500 specimens) of volcanic rocks (andesites, trachytes, basalts, etc.) from Italy, Lipari Islands, Hungary and Bohemia : presented by Prof. J. W. Judd, C.B., F.R.S.

A series of large polished slabs of Numidian marbles from the quarries of Fratelli del Monte, Oran, Algiers : presented by Cavaliere Giovanni Battista.

A collection of Cornish elvans (70 specimens) : presented by Mr. Thomas Davies.

A collection of about 150 specimens of trachytes, basalts and other volcanic rocks from New Zealand : by exchange.

A rock-collection (about 100 specimens) from the Transvaal : by exchange.

A set of Vesuvian rocks (about 90 specimens) : purchased.

1877.

Total acquisitions 3148, including :—

A series of andesitic rocks from the districts round Schemnitz and Kremnitz, Hungary : presented by Prof. J. W. Judd, C.B., F.R.S.

A large series of gneisses, schists, slates, limestones, etc., from north Greenland, Grant Land, etc., collected chiefly by Colonel H. W. Feilden during Sir G. S. Nares's Arctic Expedition of

1875-76: presented by the Lords Commissioners of the Admiralty.

Specimens of volcanic ash, etc., from the vicinity of Keswick, Cumberland: collected and presented by the Rev. J. Clifton Ward.

A series of about thirty specimens of basaltic rocks from the neighbourhood of Edinburgh: presented by Mr. J. H. Sanderson.

A large collection (over 2000 specimens) mainly of British igneous rocks, formed by Mr. Samuel Allport, of Birmingham, together with the microscopic sections prepared by him for his petrological researches on British Carboniferous dolerites, etc.: purchased.

A large series of Italian minerals and rocks, including marbles from the various quarries in the vicinity of Carrara; collected by Cavaliere G. P. Jervis: purchased.

1878.

Total acquisitions 136, including:—

A collection of thirty-six specimens of the pitchstones and quartz-felsites of the Island of Arran: presented by Prof. T. G. Bonney, F.R.S.

Rock-specimens from St. Davids, Pembrokeshire, illustrating papers on the Pre-Cambrian rocks of Wales in the *Quart. Journ. Geol. Soc.*: collected and presented by Dr. Henry Hicks, F.R.S.

1879.

Total acquisitions 5302, including:—

A large collection (about 600 specimens) of volcanic rocks from various European localities (Auvergne, Vosges, etc.): presented by Mr. H. Ludlam.

In this year, owing to new arrangements adopted in regard to the India Museum, London, various rock-collections (about 4500 specimens), chiefly from India, were transferred to the British Museum. The more important are as follows:—

A large series (about 500 specimens) of gneisses, schists, limestones, sandstones, basalts, etc., from Gaya, Bhagalpur, Shahabad and Goruckpur: collected by Dr. F. Buchanan (afterwards Hamilton), in 1810-14.

A large series (about 300 specimens) of andesitic and

basaltic lavas, limestones, etc., from Java : collected by Dr. T. Horsfield in 1816.

A large collection of schists, slates, granites, etc., from Kumaon and southern Tibet, made by Captain (afterwards Lieut.-Gen. Sir) R. Strachey, illustrating the geology of part of the Himalayas. (See *Quart. Journ. Geol. Soc.*, 1851, vol. vii, p. 292.)

Collections of basalts (the Deccan traps), laterite, etc., from Bombay, made by Colonel W. H. Sykes and by Dr. G. Buist.

A series of specimens (limestones, sandstones, slates, etc.), illustrating the geology of the Punjab Salt Range and of the Cashmere Hills : collected by Dr. A. Fleming about 1853.

A series of rock-specimens collected by the brothers (Hermann, Adolph and Robert von) Schlagintweit when on a scientific mission to India and High Asia, between the years 1854-58.

1880.

Total acquisitions 41, including :—

A collection of basaltic rocks from the neighbourhood of Burntisland and Kinghorn, Fifeshire : presented by Mr. W. Carruthers, F.R.S.

1881.

Total acquisitions 382, including :—

An illustrative series of the rocks constituting Dr. Hicks's three divisions of his Pre-Cambrian Group of St. Davids ; and a collection illustrating his papers on the Pre-Cambrian rocks of Ross-shire : presented by Dr. Henry Hicks, F.R.S. [The microscopic characters of these rocks were described by Mr. T. Davies in appendices to papers by Dr. Hicks. See *Quart. Journ. Geol. Soc.*, 1878, vol. xxxiv ; 1879, vol. xxxv ; and 1884, vol. xl ; also *Geol. Mag.*, 1880.]

A series of specimens from the St. Gotthard Tunnel, with geological tables and sections ; collected by Dr. F. M. Stappf : purchased.

A collection of about 260 specimens of the basaltic and trachytic lavas of Auvergne : purchased.

A large slab of flexible sandstone from 60 miles west of Delhi, India : purchased.

1882.

Total acquisitions 266, including :—

A collection of about 250 rock-specimens from Scotland, chiefly from Perthshire and the Island of Arran : presented by the Council of the British Association.

1883.

Total acquisitions 167, including :—

A series of andesites, dacites, basalts, limestones, etc., from the Salomon Islands : collected and presented by Mr. H. B. Guppy, M.B., Surgeon of H.M.S. *Lark*.

1884.

Total acquisitions 85, including :—

A collection of the granites of the Harz : purchased.

1885.

Total acquisitions 194, including :—

Specimens of obsidian and of calcareous and siliceous tufa from the Yellowstone Park, U.S.A. : presented by Mr. W. Carruthers, F.R.S.

1886.

Total acquisitions 977, including :—

A series of polished specimens of protogine from Mont Blanc : presented by Mr. Richard Fort.

A collection of about 150 specimens of granites, dolerites, quartzites, etc., from Western Australia : presented by Mr. E. T. Hardman.

A collection of about 400 specimens of granites, gneisses, schists, etc., from South Australia, including a series of rocks from the Barossa and Echunga Gold-fields : presented by the Government of South Australia.

A collection of granulites and schists from Saxony, illustrating Lehmann's *Untersuchungen über die Entstehung der altkrystallinischen Schiefergesteine*, Bonn, 1884 : purchased.

A collection of 266 specimens of schists, etc., from the Mont Cenis Tunnel : purchased.

1887.

Total acquisitions 664, including :—

A collection of about eighty typical rock-specimens from Sweden : presented by the Director of the Geological Survey of Sweden.

About 200 specimens of phonolites, basalts, etc., from the Island of Fernando Noronha, collected and presented by Mr. H. N. Ridley. [Specimens belonging to this collection have been described by Mr. T. Davies in *Journ. Linn. Soc.*, 1890, vol. xxvii, pp. 86–94, and by Mr. G. T. Prior in *Mineralogical Magazine*, 1897, vol. xi, pp. 171–75.]

A large series (about 400 specimens), of volcanic rocks from Japan : purchased.

1888.

Total acquisitions 595, including :—

A series of about 100 specimens of basaltic lavas, etc., from the Azores : purchased.

Collections of volcanic rocks from the Malverns, Inner Hebrides, Charnwood Forest and the Lizard : purchased.

1889.

Total acquisitions 505, including :—

A collection (about 133 specimens) of granites, quartz-felsites, etc., from China and Borneo : presented by Mr. J. W. Bassett-Smith, Surgeon, R.N.

About sixty specimens of limestones, schists, etc., collected in Somaliland by Captain S. King during an expedition from Zaila to Mount Eilo : presented by Prof. T. Rupert Jones, F.R.S. [Described by Miss C. A. Raisin in *Geological Magazine*, 1888, p. 414.]

A small collection of granites, felsites, etc., from Sokotra, made by Colonel M. Gosset : presented by Prof. T. Rupert Jones, F.R.S. [Described by Miss C. A. Raisin in *Geological Magazine*, 1888, p. 504.]

A collection of rocks from Madagascar : presented by the Rev. J. Wills.

Gneisses, schists, granites and diorites from Guernsey : collected and presented by Mr. B. B. Woodward.

A series of volcanic rocks from Germany : purchased.

1890.

Total acquisitions 1050, including :—

A collection of about 700 specimens, chiefly of volcanic rocks, made by the *Challenger* Expedition of 1873-76; including specimens from Teneriffe (basalts and phonolites), Cape Verde Islands (basalts, etc.), Island of Fernando Noronha (phonolites, basalts), Ascension Island (trachytes, basalts), Tristan d'Acunha Island (basalts), Falkland Islands (diabase, slates), Marion Island (basalts), Kerguelen Island (basalts, phonolites, etc.), Heard Island (basalts), Fiji Islands (andesites), Banda Island (andesites), Moluccas (andesites), Philippines (andesites, limestones, etc.), Juan Fernandez (basalts), Sandwich Islands (basalts, limestones), St. Paul's Rocks (serpentine), Azores (trachytic lavas), St. Thomas (diorites), Bass Straits (granites): presented by the Lords Commissioners of the Admiralty through Sir John Murray, K.C.B., F.R.S. [These rocks have been described by Prof. A. F. Renard in *Petrology of Oceanic Islands, Challenger Reports, Physics and Chemistry*, 1882, vol. vi, part vii.]

A selection from the rock-specimens collected by Deputy Inspector-General R. McCormick, R.N., during the Arctic Expedition of 1827, the Antarctic Expedition of 1839-43, and the Franklin Search Expedition of 1852-53: bequeathed.

About 50 specimens of basaltic lavas, of various dates, from Mount Etna: purchased.

1891.

Total acquisitions 282, including :—

A small collection of basaltic lavas from Kilauea, including specimens of the lava stalactites described by Prof. E. S. Dana (*Amer. Journ. Sci.*, 1889, ser. 3, vol. xxxvii, p. 441): presented by Mr. Armstrong Smith.

A collection of the metamorphic rocks resulting from the granite-intrusion at New Galloway; described by Mr. S. Allport and Prof. T. G. Bonney, F.R.S., in *Proc. Roy. Soc.*, 1889, vol. xlv, p. 193: presented by Mr. S. Allport.

A collection of about 100 small specimens of basaltic and phonolitic lavas from St. Helena: presented by Mr. R. L. Antrobus. [Some of these specimens were described by Mr. G. T. Prior in *Mineralogical Magazine*, 1903, vol. xiii, p. 256.]

A collection of about 50 specimens of the nepheline-syenites and associated camptonitic dykes of Montreal: collected and presented by Dr. G. C. Hoffmann.

1892.

Total acquisitions 526, including:—

A collection of about 70 specimens of the cossyrite- and anorthoclase-bearing lavas of Pantelleria: purchased. [Some of these specimens were described by Mr. G. T. Prior in *Mineralogical Magazine*, 1903, vol. xiii, p. 254.]

A collection of about 100 specimens of basaltic and phonolitic lavas from Gran Canaria: purchased. [Some of these specimens were described by Mr. G. T. Prior in *Mineralogical Magazine*, 1903, vol. xiii, p. 255.]

A large series (about 200 specimens) of granites, gneisses, schists, limestones, &c., from the Island of Corsica; collected by Prof. C. de Stefani, of Florence: purchased.

A series of polished slabs of modern Continental marbles from France, Belgium, Italy, Spain and Numidia: purchased.

1893.

Total acquisitions 700, including:—

A series of 369 specimens of British rocks (chiefly volcanic) collected by Mr. S. Allport, together with the microscopic sections prepared by him: purchased.

A large series of granites, schists, variolitic diabases, quartzfelsites, &c., from the Island of Elba: purchased.

1894.

Total acquisitions 1030, including:—

About 100 specimens of sandstones, limestones, shales, &c., from Matto Grosso, Brazil: collected and presented by Dr. J. W. Evans. [Described by him in *Quart. Journ. Geol. Soc.*, 1894, vol. l, p. 85.]

About 100 specimens of gneisses, schists, dolerites, &c., from Bechuanaland: collected and presented by Mr. F. E. Harman.

A series of basalts, granites, limestones, &c., from Torres Straits: collected and presented by Prof. A. C. Haddon, F.R.S [Described in *Trans. Roy. Irish Acad.*, 1894, vol. xxx, p. 419.]

A series of crystalline limestones and granulites from Ceylon: collected and presented by Lord Colin Campbell.

A large series of leucitic lavas and tuffs from the neighbourhood of Rome, collected by Dr. J. S. Rodriguez: purchased. [Described by him in *Note sulle rocce vulcaniche e principalmente su i tufi dintorni immediati di Roma*, Rome, 1893.]

A large series of granites, gabbros, schists, limestones, &c., on the Island of Giglio, collected by Prof. C. de Stefani, of Florence: purchased.

1895.

Total acquisitions 708, including:—

A series of rock-specimens from Devonshire, selected to show the relations between the Devonian and metamorphic rocks: collected and presented by Mr. A. R. Hunt.

Variolitic diabases from the Fichtelgebirge (described in *Quart. Journ. Geol. Soc.*, 1891, vol. xlvii, p. 45), and schists and variolites from the Cottian Alps (described in *Quart. Journ. Geol. Soc.*, 1890, vol. xlvi, p. 95): collected and presented by Prof. J. W. Gregory, F.R.S.

A collection of 115 specimens illustrating the contact-effects of the granite and syenite in the schist-region of the Elbthalgebirge: purchased.

1896.

Total acquisitions 632, including:—

About 100 specimens of gneisses, schists, dolerites, etc., from Sierra Leone: collected and presented by Mr. G. F. Scott Elliot. [Described by Miss C. A. Raisin in *Geological Magazine*, 1893, p. 440.]

A series of granites, sandstones, camptonitic dyke-rocks, etc., from Egypt, collected by Mr. G. F. Scott Elliot: presented by Miss C. A. Raisin. [Described by her in *Geological Magazine*, 1893, p. 436.]

1897.

Total acquisitions 1663, including:—

A series of specimens (with sections) of the deposits of the Nile Delta, obtained during the boring operations at Zagazig undertaken by the Royal Society: presented by the Royal Society (Delta Boring Committee).

A series of about 300 small specimens of rocks and minerals from the Karakoram Himalayas: collected and presented by Sir W. Martin Conway. [Described by Miss C. A. Raisin and Prof. T. G. Bonney, F.R.S., in *Proc. Roy. Soc.*, 1894, vol. lv, p. 468.]

472 thin sections of rocks (mostly veinstones, elvans, greenstones and granites of Cornwall) from the collection of the late Mr. John Arthur Phillips, F.R.S.: presented by Mr. A. G. Phillips.

A series of about 100 specimens illustrating the geology of the Southern Transvaal: collected and presented by Dr. F. H. Hatch. [Described in *Quart. Journ. Geol. Soc.*, 1898, vol. liv, pp. 73-99.]

A series of about seventy small rock-specimens from Siam; collected by Mr. H. Warington Smyth: presented by the Royal Department of Mines and Geology, Siam.

A series of over 300 specimens of gneisses, schists, slates, etc., from Italian and Alpine localities, collected by Cavaliere G. P. Jervis to supplement the series previously obtained from him: purchased.

Seventy-three polished slabs of modern marbles from Italy and Switzerland, and of antique marbles from the ruins of ancient Rome: purchased.

1898.

Total acquisitions 1022, including:—

A large, polished block of orbicular granite from Kangasniemi Finland: presented by Baron A. B. de Schultén.

A large series of rock-specimens illustrating the geology of the neighbourhood of Portsoy, Banffshire: collected and presented by Mr. J. Buie.

A series of rock-specimens from Mongolia and the Province of Liao Tong, Manchuria: collected and presented by Mr. W. H. Shockley.

1899.

Total acquisitions 490, including:—

A large polished slab of green marble from La Toma, Argentina: presented by Dr. F. P. Moreno.

A column of basalt, $14\frac{1}{2}$ feet (4.4 meters) long, from Rhenish Prussia: presented by the Directors of the London Basalt Stone Company.

A collection of over 100 specimens of gneisses, schists, ferruginous shales, etc., from the Ingwenya Berg and Embabaan district, West Swaziland: presented by Mr. Sydney Ryan. [Described by Prof. T. Rupert Jones, F.R.S., in *Geological Magazine*, 1899, pp. 105-111.]

A small series of volcanic rocks and limestones from the neighbourhood of Lake Urumia, Persia: collected and presented by Mr. R. T. Günther. [Described by Mr. G. T. Prior in *Geogr. Journ.*, 1899, vol. xiv, pp. 521-523.]

A series of about 60 specimens of andesitic lavas, etc., from

the Andes (Aconcagua, Tupungato, etc.): collected and presented by Mr. E. A. FitzGerald and Mr. S. Vines. [Described by Prof. T. G. Bonney, F.R.S., in FitzGerald's *Highest Andes*, appendix A, London, 1899.]

Rock-specimens from the Davos district (described *Quart. Journ. Geol. Soc.*, 1899, vol. lv, p. 381) and from the Manod and Moelwyns, Wales (described in *Quart. Journ. Geol. Soc.*, 1891, vol. xlvii, p. 368): collected and presented by Mr. A. Vaughan Jennings.

1900.

Total acquisitions 1058, including:—

A large polished slab of orbicular granite from Kortfors, Örebro, Sweden: presented by Dr. H. M. Bäckström.

A series of about 150 specimens of schists, sandstones, phonolitic rocks, etc., from Lake Tanganyika, Ruwenzori and Uganda: collected and presented by Mr. G. F. Scott Elliot. [Described *Quart. Journ. Geol. Soc.*, 1895, vol. li, pp. 677–679.]

A series of 50 specimens of schists, felsites, phonolites, etc., from Tropical East Africa, collected by Mr. M. Fergusson: presented by the Lake Tanganyika Expedition Committee. [Described by Mr. M. Fergusson and Mr. G. T. Prior in *Geological Magazine*, 1901, p. 362.]

A series of kenytes, basalts and phonolites from Mount Kenya: collected and presented by Prof. J. W. Gregory, F.R.S. [Described by him in *Quart. Journ. Geol. Soc.*, 1900, vol. lxvi, p. 205: see also G. T. Prior, *Mineralogical Magazine*, 1903, vol. xiii, pp. 228–263.]

A collection of 58 typical rock-specimens from Japan: presented by Dr. T. Kochibe, Director of the Geological Survey of Japan.

A collection of rock-specimens from the Christiania district, illustrating descriptions by Prof. W. C. Brögger (*Eruptivgesteine des Kristianiagebietes*, I, 1894; II, 1895; III, 1898): purchased.

1901.

Total acquisitions 405, including:—

A large collection of typical rock-specimens from India, which formed part of the India Exhibit at the Paris Exhibition of 1900; presented by the Director of the Geological Survey of India.

A series of about 200 specimens of granites, schists, felsites, andesites, &c., from the north-east coast of Siberia: collected and presented by Mr. W. H. Shockley.

A series of rock-specimens from the Bolivian Andes : collected and presented by Sir W. Martin Conway. [Described by Prof. T. G. Bonney, F.R.S., in Sir Martin Conway's *The Bolivian Andes*, London, 1901, appendix, pp. 366-386.]

1902.

Total acquisitions 1155, including :—

A series of rock-specimens, including granites, basalts and phonolitic rocks from Cape Adare, siliceous slates and grits from Duke of York Island, and basalts from Franklin Island, Mount Terror, etc. : collected by the Antarctic Expedition of the *Southern Cross*, under Mr. C. E. Borchgrevink : presented by Sir George Newnes, Bart. [Described by Mr. G. T. Prior in the *Report on the Collections made by the Southern Cross Antarctic Expedition*, published by the Trustees of the British Museum, 1902.]

A large collection of ferruginous schists, phonolitic rocks, basalts, nephelinites, etc., from the Uganda Protectorate : presented by Sir Harry H. Johnston, G.C.M.G. [Described by Mr. G. T. Prior in *Mineralogical Magazine*, 1903, vol. xiii, pp. 228-263.]

Collections of rock-specimens (with microscopic sections) from the Malverns, north Wales and Cornwall, illustrating papers in the *Quart. Journ. Geol. Soc.* : presented by Mr. F. Rutley.

Microscopic sections of rocks from St. Davids, illustrating papers of Dr. Henry Hicks, F.R.S. in the *Quart. Journ. Geol. Soc.* : presented by his widow.

1903.

Total acquisitions 278, including :—

A collection of rock-specimens from the Assynt district, Sutherlandshire : presented by the Director of the Geological Survey of Great Britain and Ireland.

A small collection of rock-specimens from New South Wales : presented by the Department of Mines and Agriculture of New South Wales.

A series of rock-specimens from Ashantee : collected and presented by Mr. N. Samuel.

A collection of 73 specimens illustrating the effects of contact-metamorphism : purchased.

SERIES C.—METEORITES.

A complete list of the Meteorites represented in the Meteorite Collection, with a statement of the total weights of the specimens representing each Fall, is given with the *Introduction to the Study of Meteorites*.

The collection is arranged in two divisions:—

Div. I. *The Introductory Series*, exhibited in case IV of the Pavilion. The specimens have been selected, arranged and labelled to serve as an *Introduction to the Study of Meteorites*.

Div. II. *The General Collection* is exhibited in three cases (I–III) of the Pavilion. The specimens of the General Collection are, for convenience, arranged in three classes, namely:—Meteoric Irons, Siderolites and Meteoric Stones; each class is then sub-divided into meteorites of known and unknown dates of fall; the specimens belonging to the former sub-division are arranged in the order of date of fall, while those belonging to the latter sub-division are arranged topographically.

The following chronological list gives the year in which each recognised meteoritic fall was first represented in the Collection.

CHRONOLOGICAL LIST (1753-1903) REFERRING TO
SERIES C.—METEORITES.

Year of acquisition.	Falls added.	Names of the additional Falls represented.
1776	1	<i>Pallas</i> : presented by the Imperial Academy of Sciences, St. Petersburg.
1778	1	<i>Otumpa</i> : small fragments presented by the Royal Society. (The large mass, weighing 1400 lb. (600 kilograms), was presented in 1826 by Sir Woodbine Parish, K.C.B., F.R.S.)
1799	1	<i>Senegal River</i> (Hatchett collection): fragment purchased.
1802	2	<i>Krakhut</i> and <i>Wold Cottage</i> : fragments presented by Sir Joseph Banks, Bart., F.R.S. (The main mass of the latter meteorite was purchased by the Trustees in 1838.)
1803	1	<i>Siena</i> : presented by Sir Joseph Banks, Bart., F.R.S.
1804	1	<i>L'Aigle</i> : presented by Prof. J. B. Biot, of Paris.
1810	7	<i>Barbotan</i> , <i>Cape of Good Hope</i> , <i>Elbogen</i> , <i>Ensisheim</i> , <i>Salles</i> , <i>Tabor</i> , and <i>Weston</i> , all of them in the Greville collection: purchased.
1814	2	<i>Red River</i> : presented by Prof. A. Bruce, of New York. <i>Stannern</i> : presented by the Imperial Museum of Vienna.
1817	2	<i>Mooresfort</i> : presented by Mr. J. G. Children, F.R.S. <i>Chantonmay</i> : purchased.
1819	3	<i>Limrick</i> : presented by Dr. Blake, of Dublin. <i>Melville Bay</i> (Ross's Iron): presented by the Lords Commissioners of the Admiralty. <i>Berlanguillas</i> : purchased.
1820	1	<i>Timochin</i> : purchased.
1821	2	<i>Bendegó River</i> and <i>Juvinas</i> : purchased.
1824	1	<i>Lénártó</i> : purchased.
1826	1	<i>Agen</i> : purchased.
1828	1	<i>Imilac</i> : presented by Sir Woodbine Parish, K.C.B., F.R.S. (Two small fragments were presented by Mr. W. Bollaert in 1857; the large mass, weighing 450 lb. (204 kilograms), was presented by Mr. George Hicks, of Newquay, in 1879.)
1831	1	<i>Bitburg</i> : presented by Mr. Henry Heuland.
1839	2	<i>Cold Bokkeveld</i> : 2 specimens, (1) presented by Mr. E. Charlesworth; (2) presented by Sir John Herschel, Bart., F.R.S., and Sir Thomas Maclear, F.R.S. <i>Nanjemoy</i> (Mantell Collection): purchased.
1840	1	<i>Zacatecas</i> : presented by Mr. J. Parkinson.
1841	4	<i>Burlington</i> : by exchange. <i>Château-Renard</i> , <i>Drake Creek</i> and <i>Little Piney</i> : purchased.
1842	2	<i>Cocke County</i> and <i>Richmond</i> : purchased.
1843	3	<i>Alkbarpur</i> : presented by Sir Proby T. Cautley. <i>Guilford County</i> and <i>Walker County</i> : purchased.
1844	3	<i>Babb's Mill</i> , <i>Chandakapur</i> and <i>Lockport</i> : purchased.
1845	1	<i>Arca</i> : purchased.

Year of acquisition.	Falls added.	Names of the additional Falls represented.
1846	13	<i>Rasgata</i> : by exchange. <i>Agram, Charlotte, Chassigny, Borgo San Donino, High Possil, Jonzac, Kharkov, Luotolaks, Mauerkirchen, Plescowitz, Smithland and Toluca</i> : purchased. (Large masses from Toluca Valley were purchased in 1860, 1866 and 1873, respectively.)
1847	3	<i>Bishopville, Carthage and Linn County</i> : purchased.
1848	3	<i>Braunau, Murfreesboro' and Seelüsgen</i> : purchased.
1849	2	<i>Asherville and Chesterville</i> : purchased.
1850	5	<i>Aldsworth, Cabarras County, Charwallas, Honolulu and Ruff's Mountain</i> : purchased.
1855	1	<i>Seneca River</i> : purchased.
1856	1	<i>Madoc</i> : presented by Sir Wm. E. Logan, F.R.S.
1858	1	<i>Les Ormes</i> : purchased.
1860	34	<i>Bustee, Durala and Shalka</i> : presented by the Secretary of State for India.
		<i>Alais, Au-son, Bethany</i> (Lion River; Springbok River; Mukerop; a specimen was presented in 1874 by the Trustees of the South African Museum), <i>Charsonville, Eichstädt, Forsyth, Girgenti, Gnarrenburg, Grüneberg, Gütersloh, Hainholz, Kuleschorka, Mezö-Madaras, Oesel, Orange River, Parlograd, Petersburg, Putnam County, Salt River, Sanchez Estate, Sarepta, Seres, Tazewell, Toulouse, Tucson</i> (another specimen of which was presented in 1863 by the Town Authorities of San Francisco), <i>Tula</i> (of which a fragment was presented in 1862 by Dr. J. Auerbach) and <i>Union County</i> , all of them in the Allan-Greg Collection: purchased.
1861	15	<i>Jewell Hill</i> (Duel Hill), <i>Nebraska, Nelson County and New Concord</i> : purchased.
		<i>Dhurmsala</i> : two specimens, the one presented by the Secretary of State for India, the other by Mr. G. Lennox Conyngham.
		<i>Assam, Futtelpur, Manegaum and Moradabad</i> : presented by the Asiatic Society of Bengal.
		<i>Pegu</i> : presented by Dr. Thomas Oldham, F.R.S.
		<i>Alessandria, Cereseto, Erzleben, Lissa, Lizna, Luponnas, Schellin and Zebraik</i> : by exchange.
		<i>Zaborzika</i> : purchased.
1862	41	<i>Cranbourne</i> : weight 3½ tons: presented by Mr. James Bruce; (the mass arrived at the Museum in 1865).
		<i>Butsura, Khiragurh, Mhow, Segoulie and Umballa</i> : presented by the Asiatic Society of Bengal.
		<i>Perth</i> : presented by Mr. William Ncyill.
		<i>Nellore and Parnallee</i> : presented by Sir Wm. T. Denison, K.C.B.
		<i>Bohumilitz, Brahin, Doroninsk, Heredia, Macao, Mainz and St. Denis-Westrem</i> : by exchange.
		<i>Aumières, Bethlehem, Black Mountain, Brazos, Castine, Claiborne, Coopertown, Deal, Favars, Harrison County, Jackson County, Kakowa, Killeter, Lagrange, Lucé, Marshall County, Milena, Monte Milone, Ohaba, Oktibbeha County, Pohlitz, Schuetz, Steinbach</i> (Rittersgrün and Breitenbach), <i>Vouillé and Wayne County</i> : purchased.

Year of acquisition.	Falls added.	Names of the additional Falls represented.
1863	41	<p><i>Joel Iron</i>: presented by Mr. L. Joel, Vice-Consul at Cobija.</p> <p><i>Kaee</i>: presented by Sir Thomas Maclear, F.R.S.</p> <p><i>Kusiali</i>: presented by Dr. Thomas Oldham, F.R.S.</p> <p><i>Vaca Muerta</i>: presented by Mr. T aylour Thomson.</p> <p><i>Albareto, Apt, Asco, Bachmut, Bialy-toek, Blansko, Borkut, Canellas, Denton County, Duruma, Epinal, Grosnaja, Kaba, Klein-Menow, Klein-Wenden, Krasnoi-Ugol, La Caille, Müssing, Marmande, Nagy-Divina, Nulles, Okniny, Pittsburg, Santa Rosa, Sierra Blanca, Slobodka, South-East Missouri, Stavropol, Tabarz, Trenzano, Uden, Utrecht, Wessely, Wöhler's Iron, Yanhuiltlan</i>: by exchange.</p>
1864	11	<p><i>Darmstadt and Nobleborough</i>: purchased.</p> <p><i>Agra</i>: presented by Mr. William Nevill.</p> <p><i>Lutschaunig Stone</i>: presented by Mr. Alfred Lutschaunig.</p> <p><i>Mambloom</i>: presented by Dr. Thomas Oldham, F.R.S.</p> <p><i>Buschhof, Caney Fork, Dakota, Pillistfer, and Tourinnes-la-Grosse</i>: by exchange.</p>
1865	3	<p><i>Obernkirchen, Orgueil, and Verkhne-Udinsk</i>: purchased.</p> <p><i>Nerft</i>: presented by Professor C. C. A. Grewingk, of Dorpat.</p>
1866	1	<p><i>Ski</i>: presented by Professor T. Kjerulf, of Christiania.</p>
1867	22	<p><i>Supuhee</i>: presented by the Secretary of State for India.</p> <p><i>Copiapo</i>: purchased.</p> <p><i>Gopalpur and Sherghotty</i>: presented by the Trustees of the Indian Museum, Calcutta.</p> <p><i>Jamkheir and Shytal</i>: presented by the Government of India.</p> <p><i>Knyahinya</i>: presented by the Hungarian Academy of Sciences, Budapest.</p> <p><i>Muddoor and Polhra</i>: presented by Dr. Thomas Oldham, F.R.S.</p> <p><i>Aumale, Bear Creek, Charcas, Coahuila</i> (the Bonanza Iron); (one of the masses, known as the Butcher Irons, was purchased by the Trustees in 1876), <i>Frankfort</i> (Ky.), <i>Mascombes, Molina, Pampang, Renazzo, Russel Gulch</i> and <i>Taney County</i> (Newton County): by exchange.</p> <p><i>Barranca Blanca, Cerro Cosina, Hacienda de Bocas and St. Mesmin</i>: purchased.</p>
1868	2	<p><i>Daniel's Kuil</i>: by exchange.</p> <p><i>Pultusk</i> (Lerici): purchased.</p>
1869	20	<p><i>Goalpara, Khetri and Pulsora</i>: presented by the Trustees of the Indian Museum, Calcutta.</p> <p><i>Krühenberg</i>: presented by Dr. G. Neumayer, of Hamburg.</p> <p><i>Udipi</i>: presented by the Secretary of State for India.</p> <p><i>Bjelaja Zerkov, Danville, Dolgoroli, Dundrum, Esnandes, Frankfort</i> (Ala.), <i>Juncal, Lodran, Prambanan, Slavetic, Tadjera and Trenton</i>: by exchange.</p> <p><i>Hesse, Ormans and Victoria West</i>: purchased.</p>
1870	5	<p><i>Moti-ka-nagla</i>: presented by the Trustees of the Indian Museum, Calcutta.</p> <p><i>Auburn and Losttown</i>: by exchange.</p> <p><i>Cléguérec and San Francisco del Mezquitil</i>: purchased.</p>

Year of acquisition.	Falls added.	Names of the additional Falls represented.
1871	1	<i>Searsmont</i> : presented by Dr. Aug. C. Hamlin, of Maine, U.S.A.
1872	1	<i>Stawton</i> : by exchange.
1873	4	<i>Howard County, Ibbenbühren, Smith's Mountain and Stewart County</i> , by exchange.
1875	11	<i>West Liberty</i> : presented by Dr. G. D. Hinrichs, of Iowa, U.S.A. <i>Zsadány</i> : presented by the Hungarian Academy of Sciences, Budapest. <i>Angers, Bandong, Beuste, Khairpur, Orvinio, Sauguis and Tjabé</i> : by exchange.
1876	5	<i>Lanceé and Oczeretna</i> : purchased. <i>Rowton</i> : presented by the Duke of Cleveland. <i>Shingle Springs</i> : presented by Mr. E. N. Winslow, of Hyannis, Mass., U.S.A.
1877	10	<i>Nash County, Vernon County and Waconda</i> : by exchange. <i>Gurram Konda</i> : transferred from the India Museum. <i>Jhung</i> : presented by Mr. A. Brandreth, of Calcutta. <i>Verkhne-Dnieprovsk</i> : presented by Professor Koulibini, of St. Petersburg. <i>Dyalpur, Judesegeri, Nagaria, Nedagolla, Santa Catharina and Sitathali</i> : by exchange.
1878	2	<i>Ställdalen</i> : purchased. <i>Cronstad</i> : presented by Mr. John Sanderson, of Natal.
1879	10	<i>Soko-Banja</i> : by exchange. <i>Mount Hicks and Serrania de Varas</i> : presented by Mr. George Hicks, of Newquay. <i>Butler, Casey County, Cynthiana, Dandapur, Rakorka, Rochester, Warrenton and Whitfield County</i> : by exchange.
1880	1	<i>Estherville</i> : purchased.
1881	5	<i>Middlesbrough</i> : presented by the Directors of the North Eastern Railway. <i>Chulafinnee, Lexington County, Smithsonian iron and Tieschitz</i> : by exchange.
1882	11	<i>Veramin</i> : presented by the Shah of Persia. <i>Cubeza de Mayo, Cangas de Onis, Gross-Liebenthal, Hungen, Kerilis, Mocs, Roda, Serrukoro, Tennasilm and Varilovka</i> : by purchase.
1883	8	<i>Ogi</i> : presented by Mr. Naotaro Nabeshima, of Japan. <i>Gnadenfrei, Lick Creek and Nagaya</i> : by exchange. <i>Alfianello, Greenbrier County, Pavlovka and Rancho de la Pila</i> : purchased.
1884	1	<i>Saint-Caprai-de-Quinzac</i> : by exchange.
1885	15	<i>Barratta</i> (micro-sections): presented by Professor A. Liversidge, F.R.S., of Sydney. (A fragment of the meteorite was presented by the same donor in 1897.) <i>Chandpur and Pirthalla</i> : presented by the Director of the Geological Survey of India. <i>Iranpah</i> : presented by Mr. Henry Hanks, of San Francisco. <i>Lucky Hill</i> : presented by the Governors of the Jamaica Institute. <i>Youndegin</i> : presented by the Rev. Charles G. Nicolay, of Perth, Western Australia.

Year of acquisition.	Falls added.	Names of the additional Falls represented.
		<i>Chili</i> (Desert of Atacama), <i>Emmitsburg</i> , <i>Kikino</i> , <i>La Pécasse</i> , <i>Le Teilleul</i> , <i>Petroparlovsk</i> , <i>Quinçay</i> and <i>Tomhannock Creek</i> : by exchange.
1886	6	<i>Nejed</i> : purchased. <i>Jenny's Creek</i> : presented by Dr. John N. Tilden, of New York State. <i>Nammianthal</i> : presented by the Director of the Geological Survey of India. <i>Nenntmannsdorf</i> : presented by Dr. H. B. Geinitz, of Dresden. <i>Grand Rapids</i> : by exchange.
1887	6	<i>Glorieta Mountain</i> and <i>Independence County</i> : purchased. <i>Djati Pengilon</i> : presented by the Government of the Netherlands. <i>Lalitpur</i> : presented by the Director of the Geological Survey of India.
1888	14	<i>Abert Iron</i> and <i>Tysnes</i> : by exchange. <i>Fort Duncan</i> and <i>Scottsville</i> : purchased. <i>Angra dos Reis</i> , <i>Chail</i> , <i>Itapicuru-Mirim</i> , <i>Karakol</i> and <i>Minas Geraes</i> : by exchange.
1889	9	<i>Alatyr</i> , <i>Assisi</i> , <i>Aubres</i> , <i>Iron Creek</i> , <i>Mornans</i> , <i>Pavlodar</i> , <i>Powder Mill Creek</i> , <i>Tabory</i> and <i>Tomatlan</i> : purchased. <i>Bhagur</i> and <i>Kalombi</i> : presented by the Bombay Branch of the Royal Asiatic Society. <i>Cape Girardeau</i> and <i>Utah</i> : by exchange.
1890	13	<i>Bella Roca</i> , <i>Bluff</i> , <i>Cleveland</i> , <i>Descubridora</i> and <i>Eagle Station</i> : purchased. <i>Santa Barbara</i> : by exchange. <i>Pirgunje</i> : part by purchase and part by exchange.
1891	25	<i>Bielokrynitschié</i> , <i>Brenham Township</i> , <i>Carlton</i> , <i>Collescipoli</i> , <i>Dona Inez</i> , <i>Farmington</i> , <i>Jelica</i> , <i>Llano del Inca</i> , <i>Migheja</i> , <i>Welland</i> and <i>Winnabago County</i> : purchased. <i>Thunda</i> : presented by Professor A. Liversidge, F.R.S., of Sydney. <i>Bischtübe</i> , <i>Cabin Creek</i> , <i>Carcote</i> , <i>Coura</i> , <i>Hammond Township</i> , <i>Holland's Store</i> , <i>Ilmaõ</i> , <i>Laurens County</i> , <i>Linnville Mountain</i> , <i>Mazapil</i> , <i>Nagy-Vázsony</i> , <i>Pacula</i> , <i>Schönenberg</i> , <i>Ssyromolotovo</i> and <i>Summit</i> : by exchange.
1892	7	<i>Baldohn</i> , <i>Cañon Diablo</i> , <i>Crow Creek</i> , <i>Jamestown</i> , <i>Kendall County</i> , <i>Mercéditas</i> , <i>Pipe Creek</i> , <i>Puquios</i> and <i>Waldron Ridge</i> : purchased. <i>Kahangarai</i> : presented by the Director of the Geological Survey of India. <i>Fukutomi</i> , <i>Jodzie</i> , <i>São Julião de Moreira</i> , <i>Toubil River</i> (Taiga) and <i>Yenshigahara</i> : by exchange. <i>Indarh</i> : purchased.
1893	10	<i>Cachiuyal</i> and <i>Montlivault</i> : by exchange. <i>Aleppo</i> , <i>Bath</i> , <i>Beaver Creek</i> , <i>Cross Roads</i> , <i>Kenton County</i> , <i>Kesen</i> , <i>Lundsgård</i> and <i>Virba</i> : purchased.
1894	11	<i>Bherai</i> : presented by the Nawab of Junagadh, India. <i>Makariva</i> : presented by Professor G. H. F. Ulrich, of Dunedin, New Zealand. <i>Bridgewater</i> , <i>Costilla Peak</i> , <i>Hex River Mountains</i> , <i>Morris-town</i> , <i>Oroville</i> and <i>Prairie Dog Creek</i> : by exchange. <i>McKinney</i> , <i>Pan de Azucar</i> and <i>Plymouth</i> : purchased.

Year of acquisition.	Falls added.	Names of the additional Falls represented.
1895	5	<i>Bishunpur</i> and <i>Bori</i> : presented by the Director of the Geological Survey of India. <i>Concepcion</i> : presented by Mr. W. Taylor, of Elgin, N.B. <i>Launton</i> and <i>Zabrodje</i> : purchased.
1896	11	<i>Ambapur Nagla</i> : presented by the Director of the Geological Survey of India. <i>Madrid</i> : presented by Don Miguel Merino, of Madrid. <i>Ballinoo</i> , <i>Canton</i> , <i>Capitan Range</i> , <i>Fisher</i> , <i>Kokstad</i> , <i>Laborel</i> , <i>Lesves</i> , <i>Long Island</i> and <i>Sacramento Mountains</i> : purchased.
1897	10	<i>Navalpulvi</i> : presented by the Director of the Geological Survey of India. <i>Arlington</i> , <i>Forsyth County</i> , <i>Locust Grove</i> , <i>Ngawi</i> , <i>Mooranoppin</i> , <i>Mungindi</i> , <i>Nocoleche</i> , <i>Roebourne</i> and <i>ThurLOW</i> : purchased.
1898	14	<i>Gambat</i> : presented by the Director of the Geological Survey of India. <i>Augustinorka</i> , <i>Ottawa</i> , <i>Pricetown</i> and <i>Zavid</i> : by exchange. <i>Kansada</i> , <i>Lançon</i> , <i>Mount Joy</i> , <i>Mount Stirling</i> , <i>Oscuro Mountain</i> , <i>Rosario</i> , <i>San Angelo</i> , <i>Savtschenkoje</i> and <i>Tonganoxie</i> : purchased.
1899	16	<i>Caperr</i> : presented by Dr. F. P. Moreno, of La Plata Museum. <i>El Ranchito</i> (Bacubirito): presented by Mr. O. H. Howarth, of London. <i>Zomba</i> : presented by Sir A. Sharpe, C.B., K.C.M.G., His Majesty's Commissioner for British Central Africa, Mr. J. F. Cunningham, and Mr. J. McClounie. <i>Allegan</i> , <i>Central Missouri</i> , <i>Deep Springs</i> , <i>Ellenboro</i> , <i>Hayden Creek</i> , <i>Higashi Koen</i> , <i>Indian Valley Township</i> , <i>La Primitiva</i> , <i>Luis Lopez</i> , <i>Meuselbach</i> , <i>Murphy</i> , <i>Ness City</i> and <i>Tombigbee River</i> : purchased.
1900	8	<i>Cacaria</i> , <i>Chupaderos</i> , <i>Illinois Gu'ch</i> , <i>Mart</i> , <i>Moctezuma</i> , <i>Nagy Borore</i> , <i>Oakley</i> and <i>St. Genevieve County</i> : purchased.
1901	7	<i>Donga Kohrod</i> and <i>Kodaikanal</i> : presented by the Director of the Geological Survey of India. <i>Guareña</i> , <i>Indio Rico</i> , <i>Niagara</i> and <i>Surprise Springs</i> : by exchange. <i>Casas Grandes</i> : purchased.
1902	13	<i>Sindhri</i> : presented by the Director of the Geological Survey of India. <i>Algoma</i> , <i>Bjurböle</i> and <i>Tarapaca</i> : by exchange. <i>Admire</i> , <i>Apoola</i> , <i>Crumlin</i> , <i>Cuernavaca</i> , <i>Eryheo</i> , <i>Gilgoin</i> , <i>N Gourcyma</i> , <i>Nochtuisik</i> and <i>Rhine Villa</i> : purchased.
1903	18	<i>Caratash</i> : presented by His Highness Kiamil Pasha. <i>Andover</i> , <i>Linum</i> , <i>Mount Browne</i> , <i>Mount Dyrning</i> , <i>Palésieux</i> , <i>Saline Township</i> , <i>San Cristobal</i> , <i>Sena</i> , <i>Sierra de la Ternera</i> and <i>Toke-uchi-mura</i> : by exchange. <i>Arispe</i> , <i>Bath Furnace</i> , <i>Finnmarken</i> , <i>Francerville</i> , <i>Heitti</i> , <i>Marjalahti</i> and <i>Reed City</i> : purchased.
Total Falls 556		

3. ALPHABETICAL LIST OF THE MORE IMPORTANT CONTRIBUTORS
TO THE COLLECTION OF MINERALS, ROCKS AND METEORITES
IN THE DEPARTMENT OF MINERALS.

His Majesty King George the Fourth. [1762–1830]

Presented, in 1828, a collection of choice specimens from the Harz Mountains; the large groups of crystals of calcite and pyrrargyrite being especially fine.

H.R.H. Albert, Prince Consort. [1819–1861]

Presented, in 1847, an enormous group of large, colourless, prismatic crystals of gypsum, from Reinhardtsbrunn, Gotha, Germany.

H.R.H. Augustus Frederick, Duke of Sussex. [1773–1843]

President of the Royal Society [1830–1838], and Trustee of the British Museum.

Presented, in 1837, about 40 specimens of serpentines, dolerites, etc., from the shores of the Gulf of St. Lawrence, sent by Lieut. Bowen, R.N.

Admiralty, Lords Commissioners of the.

Presented, in the years 1811, 1816, 1821, 1823, 1825, 1826, 1844, 1851, 1877 and 1890, various rock-collections, obtained by exploring expeditions sent out by Great Britain; also, in 1819, small fragments of the *Melville Bay* meteorite (Ross's Iron).

Alabaster (HENRY).

Presented, in 1870, crystals of sapphire and zircon from Siam.

Alibert (IV. P.).

Presented, in 1864, with other Siberian specimens, a large mass of graphite from the Alibert mine, near Battugol, Irkutsk; a large polished boulder of jade, weighing 1156 lb. (524.4 kilograms), from the same district, was purchased from him in 1863.

Allan (THOMAS). [1777–1833]

Thomas Allan, F.R.S., an Edinburgh banker, devoted his leisure to mineralogy, and began the formation of what was ultimately the finest private collection of minerals in England. Many specimens were collected by him in England, Ireland, France, Faroe Islands, etc.; others were given to, or exchanged with, him by all the well-known mineralogists and collectors of the day. He acquired Giesecke's (*q.v.*) collection of Greenland minerals. In the enrichment and arrangement of his collection, Allan was much assisted by Haidinger (*q.v.*), more especially during the years 1823–1826, whilst the latter was resident in Edinburgh; much of the material mentioned in Haidinger's earlier papers belonged to this collection. After Allan's death the collection was purchased by R. H. Greg (*q.v.*), from whom it was purchased by the Trustees in 1860.

Allport (SAMUEL). [1816–1897]

On his return from Brazil, Allport settled in Birmingham and gave his spare time to petrographical researches.

His collection of over 2000 specimens, mainly of British igneous rocks, together with the microscopic sections prepared by him for his researches on British Carboniferous dolerites, was purchased in 1877. Further smaller collections were presented by him in 1891 and 1893.

Antrobus (R. L.).

Presented, in 1891, a collection of about 100 small specimens of basaltic and phonolitic lavas from St. Helena.

Aramayo (FELIX AVELINO).

Bolivian Minister in London [1898–1903].

Presented, in 1899, crystals of argyrodite, encrusting a mass of pyrargyrite, from Bolivia.

Arny (F. M.).

Presented, in 1880, various minerals from New Mexico, including turquoise and gold.

Asiatic Society of Bengal.

Presented, in 1861, fragments of the *Assam*, *Futtehpur*, *Manegaum* and *Moradabad* meteorites; and, in 1862, of the *Butsura*, *Khiragurh*, *Mhow*, *Segowlie* and *Umballa* meteorites.

Atkins (Mrs. ANNA).

Presented, in 1871, childrenite and several other minerals from the collection of her father, J. G. Children (*q.v.*).

Auerbach (Dr. JOHANN ALEXANDER). [1815–1867]

Keeper of Minerals in the Topographical Institute of Moscow.

Presented, in 1862, a fragment of the *Tula* meteorite.

Austrian Government.

Presented, in 1862, a sharply developed, perfectly transparent and colourless, cube of salt (halite) on the matrix, from Galicia.

Ava (King of).

See BURNEX (Lieut.-Col. H.) and SYMES (Col. Michael).

Aylesford (LOUISE, Countess of). [?–1832]

Made an extensive collection of minerals, which, after her death, passed into the possession of Henry Heuland, mineral dealer of London; from him many choice specimens, selected from this collection, were purchased by the Trustees in 1834 and subsequent years; the two-volume manuscript catalogue of the Aylesford collection is now preserved in the Mineral Department.

Aylesford (HENEAGE, 5th Earl of). [1786–1859]

Son of the Countess of Aylesford mentioned above.

Presented, in 1845, a group of crystals of mellite on lignite from Thuringia; and, in 1846, a collection of about forty specimens of schists and slates from the Himalayas.

Bäckström (*Dr. HELGE MATTIAS*). [1865-]

Professor of mineralogy in the Högskola, Stockholm.

Presented, in 1900, a large polished slab of orbicular granite from Kortfors, Örebro, Sweden.

Baddeley (*JOSEPH*).

Brought back from Ceylon various mineral specimens, which he presented in 1891; one of them was afterwards found to be a new species, and was named baddeleyite.

Balfour (*Prof. ISAAC BAYLEY*). [1853-]

Collected specimens of basaltic lavas, etc., from the Island of Rodrigues, during the "Transit of Venus" expedition of 1874-1875; they were presented by the Lords Commissioners of the Treasury in 1876.

Banks (*HENRY*).

Presented, in 1820, several specimens of graphite, showing the mineral in different kinds of matrix, from Borrowdale, Cumberland.

Banks (*Sir JOSEPH, Bart.*). [1743-1820]

President of the Royal Society [1778-1820], and Trustee of the British Museum.

Presented various specimens; among them, in 1802 and 1803, fragments of the *Krakhut*, *Wold Cottage*, and *Siena* meteorites; in 1812, a specimen of surturbrand from Iceland; in 1813, a small nugget of gold, weighing 57 grains (6·69 grams), from County Wicklow; and, in 1817, ytrotantalite from Sweden.

Baring (*THOMAS*).

Presented, in 1849, a large group of small twin-crystals of calcite, from Bermuda.

Basset-Smith (*PERCY WILLIAM*).

Surgeon in the Royal Navy.

Presented, in 1889, a collection (about 130 specimens) of granites, quartz-felsites, etc., from China and Borneo.

Bathurst (*HENRY, 3rd Earl*). [1762-1834]

Presented, in 1820, a series of nepheline-syenites and other rocks collected by Dr. H. Nicoll in Sierra Leone.

Battista (*Cavaliere GIOVANNI*).

Presented, in 1876, a series of large polished slabs of Numidian marbles from the quarries of Fratelli del Monte, Oran, Algiers.

Bauer (*F.*).

Presented, in 1811, a specimen of platinum from South America.

Bayfield (*Rear-Admiral H. W.*).

For upwards of a quarter of a century in command of the survey of the Gulf of, and the River, St. Lawrence.

Collected during a survey of Lake Superior a series of granites, dolerites, etc.; the specimens (about fifty) were presented by the Lords Commissioners of the Admiralty in 1826.

Bement (CLARENCE S.).

Presented, in 1882, a large, colourless, transparent, doubly terminated crystal of quartz, from Switzerland; and, in 1903, an extremely fine group of large rhombohedra of rhodochrosite from Colorado.

His fine collection of unusually perfect mineral specimens was purchased in 1900 for the American Museum of Natural History.

Bengal, Asiatic Society of.

See ASIATIC SOCIETY OF BENGAL.

Benza (Dr. P. M.).

Presented, in 1837 and 1842, various minerals and rocks from India.

Berkley (JAMES JOHN). [1819–1862]

Chief Engineer of the Great Indian Peninsula Railway.

Presented, in 1860 and 1861, an extensive series of beautifully crystallised zeolites from the railway cuttings in the Syhadree Mountains, Bombay.

Beroldingen (FRANZ CÖLESTIN, *Baron von*). [1740–1798]

Baron von Beroldingen, a Swiss by birth, spent most of his life in Hanover and Rhenish Bavaria, where he held various ecclesiastical appointments. He travelled much for the sake of increasing his knowledge of mineralogy and geology, and amassed a large number of mineral and other specimens. His collection of minerals, consisting of about 14000 specimens, was inherited by his nephew, Count von Beroldingen, and purchased from the latter in 1816. The specimens are small in size and of mediocre quality, but at the time of acquisition they filled gaps in the Museum collection, and in addition had some interest as illustrating the ideas developed by the collector in his published works—more especially his “*Bemerkungen auf einer Reise durch die Pfälzischen und Zweybrückschen Quecksilber-Bergwerke*,” published in 1778. A manuscript German catalogue in two volumes is preserved in the Department.

Beroldingen (JOSEPH IGNACE, *Count von*). [1780–?]

Nephew of Baron von Beroldingen, mentioned above; Würtemberg Minister in London.

His uncle's collection was purchased from him in 1816.

Berzelius (*Prof. JÖNS JACOB*). [1779–1848]

The famous Swedish chemist.

Presented, in 1817, specimens of berzelianite, yttrocerite, and other Swedish minerals.

The British Museum Collection of Minerals was arranged for many years according to Berzelius's chemical system.

Biot (*Prof. JEAN BAPTISTE*). [1774–1862]

Distinguished as a physicist.

Presented, in 1804, one of the *L'Aigle* meteoric stones.

Birley (*Miss CAROLINE*).

Owner of a valuable collection of fossils and minerals.

Presented, in 1896, a large cube of purple fluor from Weardale, Durham; and also various specimens at other times.

Blake (*Dr.*).

Presented, in 1819, a fragment of the *Limerick* meteorite.

Blanford (*Dr. WILLIAM THOMAS*). [1832-]

Late of the Geological Survey of India; in 1868 accompanied to Abyssinia, as geologist, the army commanded by Lord (then Sir Robert) Napier, and collected a series of rock-specimens, which he presented in 1869. (The specimens are described in his book, "Observations on the Geology and Zoology of Abyssinia," London, 1870; some also by Mr. G. T. Prior in the "Mineralogical Magazine," 1899, vol. xii, pp. 92-95).

Bollaert (*W.*).

Presented, in 1857, two small fragments of the *Imilac* meteorite.

Bombay Branch of the Royal Asiatic Society.

Presented, in 1889, fragments of the *Bhagur* and *Kalambi* meteorites.

The Royal Asiatic Society (of London) has founded several branches in India, which must not be confounded with the Asiatic Society of Bengal (*q.v.*).

Bonney (*Prof. THOMAS GEORGE*). [1833-]

Professor of geology at University College, London [1876-1901].

Presented, in 1878, a collection of pitchstones and quartz-felsites from the Island of Arran, and has published descriptions of several collections of rocks presented to the Museum.

Born (*IGNAZ, Baron von*). [1742-1791]

The collection formed by Baron von Born, and described by him in the *Lithophylacium*, was purchased by Greville (*q.v.*); it formed the nucleus of the latter's collection, which was purchased from the heirs-at-law by the Trustees in 1810.

Bournon (*JACQUES LOUIS, Count de*). [1751-1825]

Owing to the political unrest in France, Count de Bournon was long resident in England, where he obtained employment in connection with several mineral collections. From 1794-1806 he gave much of his time to the arrangement of the Greville collection. The mineral bournonite is named after him.

Bowen (*Lieut. R.N.*).

Sent about forty rock-specimens from the shores of the Gulf of St. Lawrence; the specimens were presented to the Trustees by H.R.H. the Duke of Sussex in 1837.

Brandreth (*A.*).

Presented, in 1877, a fragment of the *Jhung* meteorite.

Brandreth (*E. L.*).

Presented, in 1868, a large mass of salt (halite) from Salt Range, Punjab, India.

Bright (*BENJAMIN*). [?-1900]

See BRIGHT (Richard).

Bright (*BENJAMIN HEYWOOD*). [1787-1843]

See BRIGHT (Richard).

Bright (RICHARD). [1754-1840]

Richard Bright, senior, was a merchant and banker in Bristol, and resided at Ham Green, on the Avon, near that city. A commercial connection with the mines of Cornwall made him early a collector of minerals and fossils. His second son, Benjamin Heywood [1787-1843], added to the collection; the latter's only son, Benjamin [?-1900], presented it to the Trustees in 1873. British minerals, especially celestite, göthite, agate, etc., from the neighbourhood of Bristol are well represented in the collection. Of foreign minerals, special mention may be made of red corundum from St. Gotthard, and large crystals of idocrase from Egg, Norway.

British Association, Council of the.

Presented, in 1882, a collection of about 250 rock-specimens from Scotland.

Brögger (Prof. WALDEMAR CHRISTOPHER). [1851-]

Distinguished as a geologist and mineralogist.

Presented, in 1895, a specimen of bröggerite, from Moss, Norway; a collection of rock-specimens from the Christiania district, illustrating descriptions by him (*Eruptivgesteine des Kristianiagebietes*, I., 1894; II., 1895; III., 1898), was purchased from a dealer in 1900.

Bruce (Prof. ARCHIBALD). [1777-1818]

Presented, in 1811, a specimen of chrysoberyl from Greenfield, New York; and, in 1814, a fragment of the *Red River* meteorite.

Bruce (JAMES).

Presented, in 1862, the large *Cranbourne* meteorite, weighing 3½ tons, which arrived at the Museum in 1865; it is by far the largest meteorite in the collection.

Brukowsky (J.).

Presented, in 1884, various gem-stones, mostly faceted.

Buchanan, afterwards Hamilton (Dr. FRANCIS). [1762-1829]

Distinguished as a botanist.

Collected, in 1810-1814, a large series of rocks from Gaya, Bhagalpur, Shahabad and Goruckpur; the specimens were incorporated in the India Museum and transferred to the British Museum in 1879.

Buckland (Prof. WILLIAM, Dean of Westminster). [1784-1856]

Presented, in 1823, a specimen of aragonite from Buckfastleigh, Devonshire.

Budapest, Hungarian Academy of Sciences.

Presented, in 1867 and 1875 respectively, fragments of the *Knyahinya* and *Zsadány* meteorites.

Buie (JAMES).

Presented, in 1898, a large series of rock-specimens which he had collected to illustrate the geology of the neighbourhood of Portsoy, Banffshire.

Buist (*Dr. G.*).

Collected basalts (the Deccan traps), laterite, etc., from Bombay; the specimens were incorporated with the India Museum and in 1879 transferred to the British Museum.

Burney (*Lieut.-Col. H.*).

Presented, in 1841, a cup of jadeite, which had been given to him by the King of Ava.

Calcutta, Trustees of the Indian Museum.

Presented, in 1867, fragments of the *Gopalpur* and *Sherghotty* meteorites, and, in 1870, of the *Moti-ka-nagla* meteorite.

Caldcleugh (*ALEXANDER*).

Presented, in 1822, a specimen of silver in calcite from Chili.

Campbell (*Lord COLIN*). [1853—]

Presented, in 1894, a series of crystalline limestones and granulites, which he had collected in Ceylon.

Campbell (*JAMES R.*).

On the death of Mr. Campbell, of Cheltenham, the Trustees were permitted to make a selection from the well-chosen mineral specimens, upwards of 3000 in number, which had been brought together by him; as a result nearly 500 specimens were purchased in 1861 and 1862, and further three remarkable specimens were presented by his widow, one of the latter being a radiating group of crystals of erythrite, of a rich crimson colour, on a matrix of crystallised quartz, from Schneeberg in Saxony.

Carruthers (*WILLIAM*). [1830—]

Keeper of the Botanical Department of the British Museum [1871–1895].

Presented, in 1880, a collection of basaltic rocks from the neighbourhood of Burntisland and Kinghorn, Fifeshire; and, in 1885, specimens of obsidian and of calcareous and siliceous tufa from the Yellowstone Park, U.S.A.

Cathcart (*CHARLES MURRAY, 2nd Earl of*). [1783–1859]

Discoverer, in 1841, of a new mineral, found in excavating the Bishopston Tunnel near Port Glasgow, to which after him (Lord Greenock, as he then was) the name of greenockite was given.

Presented, in 1844, three specimens of the mineral.

Cautley (*Sir PROBY THOMAS*). [1802–1871]

Projector and constructor of the Ganges Canal.

Presented, in 1843, a fragment of the *Akbarpur* meteorite.

Charlesworth (*EDWARD*). [1813–1893]

Presented, in 1839, a specimen of the *Cold Bokkeveld* meteorite.

Charleton, or Charlton (*WILLIAM*).

See COURTEN (William).

Children (JOHN GEORGE). [1777-1852]

Keeper of the Zoological Department of the British Museum [1837-1840].

Presented, in 1817, a fragment of the *Mooresfort* meteorite. In 1871, after his death, childrenite and several other mineral specimens from his collection were presented by his daughter, Mrs. Atkins.

Christie (H.).

Presented, in 1842, a specimen of tscheffkinite from Ilmen Mountains, Russia.

Church (ARTHUR HERBERT). [1834-]

Professor of chemistry at the Royal Academy.

Presented many specimens, including (1881) a group of crystals of uranocircite from Falkenstein, Saxony.

Clapperton (*Capt.* HUGH, *R.N.*). [1788-1827]

Collected (1822-1824) a series of granites, sandstones, limestones, basalts, etc., in the Soudan; the specimens (about 70) were presented by the Lords Commissioners of the Admiralty in 1825.

Cleveland (HARRY GEORGE, *4th Duke of*). [1803-1891]

Presented, in 1876, the *Rowton* meteorite.

Cliffe (*Dr.* JOSÉ ESTEVÃO).

Presented, in 1837, gold, diamond and other minerals from Brazil.

Cogswell (*Dr.* A. C.).

Presented, in 1861, 40 specimens of zeolites from Nova Scotia.

Collins (ARTHUR LAUNCELOT). [1868-1902]

Mining engineer.

Presented, in 1891, a large crystal of sphene from Risör, Norway.

Collins (HENRY F.).

Mining engineer.

Presented, in 1903, a remarkable crystal of wollastonite, in great part changed into opal, from Santa Fé, Chiapas, Mexico.

Compton (*Earl, afterwards 2nd Marquess of Northampton*).

See NORTHAMPTON (*Spencer Joshua Alwyne, 2nd Marquess of*).

Conway (*Sir* WILLIAM MARTIN). [1856-]

Slade professor of Fine Art at the University of Cambridge, and a well-known explorer.

Presented, in 1897, a series (about 300 small specimens) of rocks and minerals from the Karakoram Himalayas; in 1899, a collection (46 specimens) of Bolivian minerals; and, in 1901, a series of rock-specimens from the Bolivian Andes.

Conyngham (G. LENNOX).

Presented, in 1861, a fragment of the *Dhurmsala* meteorite.

Cook, afterwards Widdrington (*Capt.* SAMUEL EDWARD, *R.N.*). [?-1856]

Presented, in 1831, a specimen of malachite from Linares, Spain.

Cotter (*Miss G. E.*).

Presented, in 1876, a remarkable specimen of quartz ("cotterite") discovered by her in Rock Forest, County Cork.

Courten, otherwise Charleton, or Charlton (**WILLIAM**).
[1642-1702]

William Courten came of a family which, especially during the lifetime of his grandfather, Sir William Courten, occupied a pre-eminent position amongst the great mercantile traders of the day, but which about the date of his birth met with misfortune, mainly owing to political disturbances. William Courten himself seems to have had little or no disposition for mercantile affairs. To avoid the turmoil caused by the litigation for and against the family estates, he retired to Montpelier, and, dropping his own name, assumed that of Charleton (or Charlton). Here he devoted himself to the enrichment of his museum, which, on his return to England after fourteen years' absence, he arranged in ten rooms in the Middle Temple. At his death his large collections passed to Sir Hans Sloane (*q.v.*), his residuary legatee.

Cowper (**SYDNEY**).

Presented, in 1886, a large slab of golden-yellow cat's-eye (quartz), and another of blue, asbestiform crocidolite, from the Asbestos Mountains, South Africa.

Cracherode (*Rev. CLAYTON MORDAUNT*). [1730-1799]

Trustee of the British Museum [1784-1799].

A member of an ancient family, long resident in Essex, Cracherode passed most of his life in London. Although he took orders in the English Church, and held for a time the curacy of Binsey, near Oxford, he neither sought nor obtained further preferment, but devoted all his leisure to amassing a fine collection of books, prints, coins, medals, gems, minerals and shells, all of which came to the Museum by bequest in 1799. Many of the mineral specimens were choice examples, and their cost to the collector had been considerable. A detailed manuscript catalogue of the collection is preserved in the Department. Special mention may be made of:—polished slabs of labradorite and lapis lazuli; crystallised specimens of blende, tetrahedrite, argentite, pyrargyrite and heulandite.

Cunningham (**J. F.**).

Presented, in 1899, one of the *Zomba* meteoric stones.

Cust (**L.**).

Presented, in 1894, 36 specimens, mostly English, from the mineral collection made by his mother, Lady Cust.

Dana (**EDWARD SALISBURY**). [1849-]

Professor of physics and curator of mineralogy at Yale University.

Presented, in 1878, specimens of the newly-discovered minerals eosphorite, triploidite, dickinsonite and lithiophilite from Branchville, Connecticut.

Davies (**THOMAS**). [1837-1892]

Assistant in the Mineral Department of the British Museum [1862-1892].

Presented, in 1874, about 50 specimens of basaltic rocks from Fifeshire and Skye; and many other specimens in subsequent years.

Davis (*Major* ALEXANDER HENRY).

Presented, in 1903, a magnificent crystal of kunzite, a lilac-coloured variety of spodumene, from California.

Denison (*Sir* WILLIAM THOMAS, *K.C.B.*). [1804–1871]

Governor of Madras [1861–1866].

Presented, in 1862, the *Nellore* and *Parnallee* meteorites.

Des Cloizeaux (ALFRED LOUIS OLIVIER LEGRAND). [1817–1897]

Professor of mineralogy at the Natural History Museum, Paris.

Presented, in 1879, senarmontite, several large colourless octahedra on the matrix, from Mine d'Hamimad, Constantine, Algeria.

Devonshire (WILLIAM GEORGE SPENCER, *6th Duke of*). [1790–1858]

Presented, in 1820, calcite and copper-pyrites from the Ecton mine, Leek, Staffordshire.

Doran (PATRICK).

Collected about 200 specimens of volcanic rocks in Ireland which were purchased in 1869.

Douglas (*Dr.* JAMES).

Metallurgist, of New York.

Presented, in 1892, a large mass of botryoidal malachite from Copper Queen mine, Bisbee, Arizona; and, in 1896, crystallised masses and groups of chessylite and malachite from the same locality.

D'Oyly (*Rev.* GEORGE, *D.D.*). [1778–1846]

Brother of Sir John D'Oyly, Bart., who held various high official positions in Ceylon, and doubtless sent over the mineral specimens from Ceylon, which Dr. D'Oyly presented in 1827.

Dudgeon (PATRICK). [1817–1894]

One of the founders of the Mineralogical Society; gave to the Edinburgh Museum of Science and Art his large collection of minerals, which was especially rich in Scottish specimens.

Presented, in 1858, zeolites and other minerals from Scotland and the Faroe Islands; and, in 1882, leadhillite, hemimorphite, etc., from Leadhills and Wanlockhead, amazon stone from Tongue, Sutherlandshire, and other minerals.

Duncan (JOHN).

Presented, in 1782, a specimen of malachite from China.

Dunn (EDWARD JOHN).

About 200 specimens of dolerites, schists, conglomerates, etc., from South Africa (Namaqualand, Transvaal, etc.), collected by him, were obtained by exchange in 1873.

Durazzo (*Marchese* IPPOLITO). [1754–1818]

Mineralogist and afterwards botanist, of Genoa.

His collection of minerals was probably acquired by Greville (*q.v.*); an undated manuscript catalogue of the collection is preserved in the Department. (The epoch of formation of the collection and catalogue is roughly indicated by the system of classification, which is the one published by Cronstedt in 1758.)

East India Company, Directors of the.

Presented, in 1848, 19 specimens of rocks and minerals from Aden.

(After the Mutiny the powers of the Company were taken over by the Crown in 1858. Hence, for specimens presented at a later date, see India, Secretary of State for.)

Eck (F. A.).

Presented, in 1882, chlorargyrite, native silver, argentopyrite, and other minerals, from Chili.

Ecton Mine, Proprietors of the.

Presented, in 1885, large, dark, scalenohedral crystals of calcite, enclosing copper-pyrites, from Ecton mine, Leek, Staffordshire.

Egerton (Sir PHILIP MALPAS DE GREY, Bart.). [1806-1881]

Trustee of the British Museum; much interested in geology, especially fossil fishes.

Presented, in 1840, crystallised vivianite, contained in the interior of an Irish deer's tooth, from Ireland.

Elliot (GEORGE FRANCIS SCOTT).

Botanist.

Presented, in 1896, about 100 specimens of gneisses, schists, dolerites, etc., which he had collected in Sierra Leone; and, in 1900, about 150 specimens of schists, sandstones, phonolitic rocks, etc., which he had collected in British East Africa.

Evans (Dr. JOHN WILLIAM).

Geologist.

Presented, in 1894, about 100 specimens of sandstones, limestones, shales, etc., which he had collected in Matto Grosso, Brazil.

Exeter (BROWNLOW, 9th Earl of). [1725-1793]

Presented, in 1764, a table-top inlaid with Vesuvian products; and, in 1765, a polished oval slab of brown and yellow jasper.

Feilden (Col. HENRY WEMYSS, C.B.). [1838-]

Collected a large series of gneisses, schists, slates, limestones, etc., from north Greenland, during Sir G. S. Nares's Arctic Expedition of 1875-1876; the specimens were presented by the Lords Commissioners of the Admiralty in 1877.

Fergusson (MALCOLM).

Collected a series of about 50 specimens of schists, felsites, phonolites, etc., from Tropical East Africa; the specimens were presented by the Lake Tanganyika Expedition Committee in 1900.

FitzGerald (EDWARD ARTHUR). [1871-]

Climber and explorer.

Presented (with Mr. S. Vines), in 1899, a series (about 60 specimens) of andesitic lavas, etc., which they had collected in the Andes.

Fleming (Dr. ANDREW).

Collected, about the year 1853, a series of specimens (limestones, sandstones, slates, etc.), illustrating the geology of the Punjab Salt Range and of the Cashmere Hills; the specimens were incorporated in the India Museum, and transferred to the British Museum in 1879.

Flinders (*Capt. MATTHEW, R.N.*). [1774–1814]

Hydrographer and discoverer.

Collected a series of schists, slates, limestones, etc., on the north and east coasts of Australia in 1801–1803; the specimens (about 50) were presented by the Lords Commissioners of the Admiralty in 1811.

Fort (*RICHARD*). [1856–]

Presented, in 1886, a series of polished specimens of protogine from Mont Blanc.

Geinitz (*Dr. HANNS BRUNO*). [1814–1900]

Director of the Royal Mineralogical Museum at Dresden [1857–1900]. Presented, in 1886, a fragment of the *Neuntmannsdorf* meteorite.

Giesecke (*CHARLES LEWIS*). [1761–1833]

Carl Ludwig Metzler (afterwards Giesecke) collected minerals during a six years' residence in Greenland. In 1811, the ship containing the specimens collected by him was captured by a French privateer, retaken by an English frigate, and with its cargo sold by auction at Leith; many of the specimens were acquired by Thomas Allan (*q.v.*). In 1813, Giesecke returned from Greenland with another collection, and visited Allan at Edinburgh. Through the latter's instrumentality, he was shortly afterwards appointed director of the Museum of the Royal Dublin Society.

Gosset (*Col. M.*).

See JONES (*Prof. THOMAS RUPERT*).

Gravine (*G.*).

Presented, in 1838, twenty-four Sicilian ambers.

Great Britain and Ireland, Director of the Geological Survey of.

Presented, in 1903, a collection of rock-specimens from the Assynt district, Sutherlandshire.

Great Laxey Mine, Proprietors of the.

Presented, in 1851, a very large group of crystals of galena with rhombohedra of calcite and some blende, from the mine.

Greg (*ROBERT HYDE*). [1795–1875]

After the death of Thomas Allan (*q.v.*), his mineral collection was privately purchased in 1835 from his executors through Prof. Trail, of Edinburgh, by Robert Hyde Greg, a Manchester merchant, to whose residence, Norcliffe Hall, Cheshire, the collection was moved in the following year, 1836. R. H. Greg, although possessed of some knowledge of mineralogy, was better known as an economist and antiquary, and for some years after it came into his possession no additions were made to the collection. His son, Robert Philips [1826–], took up the subject with great vigour, and for three years, 1848–1851, spent considerable sums in bringing the collection up to date by the acquisition of new specimens, mostly through various dealers. R. P. Greg is well-known to mineralogists as joint author with W. G. Lettsom of a "Manual of the Mineralogy of Great Britain and Ireland," published in 1858, which contains many allusions to specimens in the Allan-Greg collection. In 1860, the collection was purchased by the Trustees from R. H. Greg

through his son. It consisted at that date of about 9000 specimens, all of which were numbered and arranged. Its series of British minerals, with the exception of Cornish specimens, was the finest known. The collection was also rich in Norwegian minerals, and the series of chessylite and idocrase were extraordinarily good. It also included specimens of twenty-seven meteorites which were at that time unrepresented in the Museum.

Greg (ROBERT PHILIPS). [1826-]

Son of Robert Hyde Greg (*q.v.*).

Gregory (JAMES REYNOLDS). [1832-1900]

Mineral dealer, of London.

A selection (58 specimens) of faceted stones (sphene, spinel, sapphire, zircon, etc.) was purchased from his collection in 1889.

Gregory (JOHN WALTER). [1864-]

Assistant in the Geological Department of the British Museum [1887-1900]; professor of geology and mineralogy at the University of Melbourne since 1900; director of the Geological Survey of Victoria since 1901.

Presented, in 1895, variolitic diabases collected by him in the Fichtelgebirge, and schists and variolites collected by him in the Cottian Alps; and, in 1900, a series of rock-specimens collected by him during his expedition to Mount Kenya in 1892-1893.

Grenville (WILLIAM WYNDHAM, *Baron*). [1759-1834]

Distinguished as a statesman.

Presented 189 specimens of Peruvian minerals, chiefly ores, in 1809; a manuscript list of them, received at the same time, is preserved in the Department.

Greville (*Rt. Hon.* CHARLES FRANCIS, *P.C.*). [1749-1809]

The *Rt. Hon.* Charles Greville, *P.C.*, *F.R.S.*, of London, son of the first Earl of Warwick, and nephew of Sir William Hamilton, died intestate in the year 1809, and it became necessary to realise his property for division among his next-of-kin. The property included a collection of minerals which he had been forming for more than thirty years, and had arranged in his house at Paddington Green. Its nucleus was the collection of Baron von Born (*q.v.*), which was purchased from him by Greville. To this was probably added the collection of the Marchese Ippolito Durazzo (*q.v.*). Between 1794 and 1806 Count de Bournon (*q.v.*) gave much time to the arrangement of Greville's collection, and during the same period gave advice as regarded further acquisitions. The collection became eventually the finest assemblage of minerals which had been seen in England, and was declared by English mineralogists and Count de Bournon in 1810 to be in most parts equal, and in many parts superior, to the best Continental collections. A sum of money was specially voted by Parliament for the purchase of the collection, numbering about 14800 specimens, for the British Museum. The faceted stones of the Greville collection did not form part of this purchase, but had been disposed of separately; but the precious stones in their native condition were well represented; there were fine series of crystallised diamond, ruby, sapphire, emerald, topaz, and rubellite. It also included fragments of the following meteorites:—*Barbotan*, *Cape of Good Hope*, *Elbogen*, *Ensisheim*, *Salles*, *Tabor* and *Weston*, all of which had been unrepresented in the Museum Collection.

Grewingk (CONSTANTIN CASPAR ANDREAS). [1819–1887]

Professor of mineralogy at the University of Dorpat [1857–1887].

Presented, in 1865, a fragment of the *Nerft* meteorite.

Grey (Sir GEORGE, K.C.B.). [1812–1898]

A famous explorer and statesman.

Presented, in 1845, a collection (about 300 specimens) of granites, schists, sandstones, limestones, etc., from South Australia; and, in 1855, a specimen of jade from New Zealand.

Günther (ROBERT THEODORE). [1869–]

Fellow and tutor of Magdalen College, Oxford.

Presented, in 1899, a small series of volcanic rocks and limestones, which he had collected in the neighbourhood of Lake Urumia, Persia.

Guppy (HENRY BROUGHAM).

Surgeon of H.M.S. *Lark*.

Presented, in 1883, a series of andesites, dacites, basalts, limestones, etc., which he had collected in the Salomon Islands.

Guthrie (C. S. J. L.).

Presented, in 1869, a remarkable parallel growth of crystals of rubellite, of a deep colour, from Ava.

Haddon (ALFRED CORT). [1855–]

Lecturer in ethnology at the University of Cambridge.

Presented, in 1894, a series of basalts, granites, limestones, etc., which he had collected at Torres Straits.

Haidinger (WILHELM KARL VON). [1795–1871]

Haidinger, born at Vienna, early displayed a bent towards mineralogy, and, in 1812, studied with Prof. Mohs at Graz, accompanying him to Freiberg on the latter's transference to that town in 1817. He remained there five years, and, in 1822, travelled to France and England. He made the acquaintance of Thomas Allan (*q.v.*), an Edinburgh banker, and rendered him great assistance in the formation and arrangement of his fine mineral collection. During the years 1825 and 1826, he accompanied Allan's son, Robert, on a scientific journey through nearly the whole of Europe. For thirteen years (1827–1840) he was with his brothers at their porcelain factory in Elbogen, and, in 1840, succeeded Mohs at Vienna. Here he founded the union of the "Freunde der Naturwissenschaften," from which sprang the Academy of Sciences and numerous other scientific societies. In 1849, he was appointed director of the new Geologische Reichsanstalt, a post held till his retirement in 1866.

Hamilton (*Dr.* FRANCIS).

See BUCHANAN, afterwards HAMILTON (*Dr.* Francis).

Hamilton (*Rt. Hon. Sir* WILLIAM, K.B.). [1730–1803]

British Minister at the Court of Naples.

Presented specimens of lavas, and a series of large polished sections of volcanic bombs from the dolomitic breccias of Monte Somma, Vesuvius, in the years 1768, 1769, 1772 and 1779.

Hamlin (*Dr.* AUGUSTUS CHOATE). [1828–]

Of Maine, U.S.A.

Presented, in 1871, a fragment of the *Searsmont* meteorite.

Hanks (*Prof.* HENRY G.).

Of San Francisco.

Presented, in 1885, a fragment of the *Ivanpah* meteorite.

Hardman (EDWARD TOWNLEY). [1845–1887]

Presented, in 1886, a collection (about 150 specimens) of granites, dolerites, quartzites, etc., from Western Australia.

Harman (FREDERICK E.).

Presented, in 1894, about 100 specimens of gneisses, schists, dolerites, etc., from Bechuanaland.

Harrington (*Dr.* BERNARD JAMES).

Presented, in 1885, dawsonite, phlogopite (a large crystal), meneghinite, etc., from Canada.

Hatch (*Dr.* FREDERICK HENRY). [1864–]

Geologist and mining engineer.

Presented, in 1897, a series of about 100 rock-specimens, which he collected to illustrate the geology of the southern Transvaal.

Hatchett (CHARLES). [1765–1847]

Charles Hatchett, F.R.S., of London, devoted the earlier part of his life to the study of mineralogy and chemistry, and is still remembered by chemists for his discovery of a new metal to which he gave the name columbium. His extensive mineral collection, numbering some 7000, mostly small, specimens, was purchased in 1799. The collection was particularly rich in British minerals, and, in addition, Mr. Hatchett, in the course of his travels on the Continent, and by means of correspondence, had obtained many good illustrations of foreign minerals; from Count Apollon de Moussin Poushkin, for example, he had received a large number of Russian specimens, a manuscript list of which is preserved in the Department. The collection also included a fragment of the *Senegal River* meteorite. Hatchett presented, in 1821, a specimen of hatchettite (the mineral species named after him) from Merthyr Tydvil, South Wales.

Hauer (*Dr.* CARL RITTER VON). [1819–1880]

Of Vienna.

Prepared numerous so-called artificial crystals, which were shown in the Austrian Court of the Exhibition held in London in the year 1862; the specimens were presented in the same year.

Hearne (SAMUEL). [1745–1792]

Explorer.

Brought, in 1771, a large water-worn mass of copper from a spot 29 or 30 miles S.S.E. of the mouth of the Coppermine river, British North America; the specimen was presented to the British Museum by the Hudson Bay Co. in 1818.

Herschel (*Sir* JOHN FREDERICK WILLIAM, *Bart.*). [1792–1871]

Distinguished as an astronomer.

Presented, in 1839, a specimen of the *Cold Bokkeveld* meteorite.

Heuland (HENRY). [1777?–1856]

Mineral dealer, of London.

Many specimens have been acquired through him, notably those

selected from the extensive collection belonging to the Countess of Aylesford (*q.v.*); he also presented, in 1831, a fragment of the *Biburg* meteorite.

Hicks (GEORGE). [?–1902]

Of Newquay.

Presented, in 1879, the large mass, weighing 450 lb. (204 kilograms), of the *Imilac* meteorite, and also the *Mount Hicks* and *Serrania de Varas* meteorites; and, in 1882, a large pure mass of chlorargyrite from Florida mine, Taltal, Atacama, Chili.

Hicks (Dr. HENRY). [1837–1899]

Presented, in 1878, rock specimens which he had collected at St. Davids, Pembrokeshire; and, in 1881, a similar series together with a collection from Ross-shire, illustrating his papers on the Pre-Cambrian rocks published in the *Quart. Journ. Geol. Soc.* The corresponding thin sections were presented by his widow in 1902.

Hidden (WILLIAM EARL).

Presented, in 1895, mackintoshite from Texas, and ruby from North Carolina. "Hiddenite," a rich green variety of spodumene, was named after him; a fine faceted specimen was purchased in 1881.

Hill (?).

Presented, in 1827, a specimen of hatchettite from Merthyr Tydvil, South Wales.

Hinrichs (Dr. GUSTAVUS DETLEF). [1836–]

Of Iowa, U.S.A.

Presented, in 1875, a fragment of the *West Liberty* meteorite.

Hodgson (JOSEPH). [1788–1869]

Presented, in 1857, a specimen of jarrowite.

Hoffmann (Dr. GEORGE CHRISTIAN).

Assistant-director of the Canadian Geological Survey.

Presented, in 1891, a collection (about 50 specimens) made by him of the nepheline-syenites and associated camptonitic dykes of Montreal, and also several minerals.

Hohmann (THEODOR). [1843–1897]

Mining engineer in Chili.

A series of about 55 specimens, selected from his private collection of South American minerals, was purchased in 1903.

Holdsworth (T. H.).

Presented, in 1832, childrenite from Crinnis mine, Cornwall.

Hooper (THOMAS J.).

Presented, in 1899, a large specimen of andorite, encrusted with numerous large crystals, from Itos Atocha mine, Oruro, Bolivia.

Horsfield (Dr. THOMAS). [1773–1859]

Keeper of the Museum of the East India Company, London [1820–1859].

Collected, in 1816, a large series (about 300 specimens) of andesitic and basaltic lavas, limestones, etc., from Java; the specimens were incorporated with the India Museum, and transferred to the British Museum in 1879.

Howarth (OSBERT HENRY).

Of London.

Presented, in 1899, a fragment of the *El Ranchito* (Bacubirito) meteorite.

Hudson Bay Company.

Presented, in 1818, a waterworn mass of copper, brought by Samuel Hearne from a spot 29 or 30 miles S.S.E. of the mouth of the Coppermine river, British North America, in 1771.

Hume (Sir ABRAHAM, Bart.). [1749–1838].

Presented, in 1822, two polished slabs of jadeite from China.

The fine mineral collection brought together by him is in the possession of the University of Cambridge.

Hungarian Academy of Sciences.

See BUDAPEST, Hungarian Academy of Sciences.

Hunt (ARTHUR ROOPE).

Presented, in 1895, a series of rock-specimens, which he had collected in Devonshire; the specimens were selected to show the relations between the Devonian and metamorphic rocks.

Hussak (Dr. EUGEN).

Of the Comissão Geographica e Geologica de São Paulo, Brazil.

Presented, in 1897, new minerals (triphyte, derbylite and lewisite) from Brazil.

India, Director of the Geological Survey of.

Presented fragments of the *Chandpur* and *Pirthalla* meteorites in 1885, of the *Nammianthal* meteorite in 1886, of the *Lalitpur* meteorite in 1887, of the *Kahangarai* meteorite in 1892, of the *Bishunpur* and *Bori* meteorites in 1895, of the *Ambapur Nagla* meteorite in 1896, of the *Nawalpali* meteorite in 1897, of the *Gambat* meteorite in 1898, of the *Donga Kohrod* and *Kodaikanal* meteorites in 1901, and of the *Sindhri* meteorite in 1902; also a large crystal of colourless, transparent blödite, very symmetrically developed on all sides, from Warcha Mine, Salt Range, Punjab, India, in 1893; and, in 1901, a large collection of typical rock-specimens from India, which formed part of the India Exhibit at the Paris Exhibition of 1900.

India Museum, London.

In 1877, fragments of meteorites, including the *Gurram Konda* stone, and, in 1879, various mineral specimens and rock-collections, were transferred from the India Museum.

India, Secretary of State for.

Presented the *Bustee*, *Durala* and one of the *Shalka* meteoric stones in 1860, a fragment of the *Dhurmsala* meteorite in 1861, one of the *Supuhee* meteoric stones in 1865, and the *Udipi* meteorite in 1869.

Indian Museum, Trustees of the.

See CALCUTTA, Trustees of the Indian Museum.

Inglis (Sir ROBERT HARRY, Bart.). [1786–1855]

Trustee of the British Museum.

Presented, in 1842, harmotome, strontianite, etc., from Strontian.

Jamaica Institute, Governors of the.

Presented, in 1885, a fragment of the *Lucky Hill* meteorite.

Jennings (ALFRED VAUGHAN). [1864–1903]

Demonstrator of geology and botany at the Royal College of Science, Dublin.

Presented, in 1899, rock-specimens, which he had collected in the Davos district, and in the Manod and Moelwyns, Wales.

Jervis (Cavaliere GUGLIELMO PAGET).

Curator of the Reale Museo Industriale Italiano, Turin.

A large series of Italian minerals and rocks, including marbles from the various quarries in the vicinity of Carrara, collected by him, was purchased in 1877; and a series (300 specimens) of gneisses, schists, slates, etc., from Italian and Alpine localities, to supplement the earlier series, was purchased in 1897.

Joel (LEWIS).

Vice-Consul at Cobija.

Presented, in 1863, a meteoric iron found in the Desert of Atacama, Chili.

Johnson (J. C. F.).

Presented, in 1897, specimens of gold ores from the various gold-fields of Australia.

Johnston (Sir HARRY HAMILTON, G.C.M.G.). [1858–]

Presented, in 1902, a large collection of ferruginous schists, phonolitic rocks, basalts, nephelinites, etc., from the Uganda Protectorate, of which he was Commissioner (1899–1901).

Jones (Prof. THOMAS RUPERT). [1819–]

Presented, in 1889, about 60 specimens of limestones, schists, etc., which had been collected in Somaliland by Captain S. King during an expedition from Zaila to Mount Eilo, and a small series of granites, felsites, etc., which had been collected by Col. M. Gosset in Sokotra.

Judd (Prof. JOHN WESLEY, C.B.). [1840–]

Professor of geology since 1876 at, and dean since 1895 of, the Royal College of Science, London.

Presented, in 1874, a collection of rock-fragments from Mull and Arran, illustrating his papers in the *Quart. Journ. Geol. Soc.* on the Tertiary eruptive rocks from the Western Islands of Scotland; and, in 1877, a series of andesitic rocks from the districts round Schemnitz and Kremnitz, Hungary; and many other specimens in subsequent years.

Junagadh (Nawab of).

Presented, in 1894, a fragment of the *Bherai* meteorite.

Keilhau (Prof. BALTHAZAR MATHIAS). [1797–1858]

Presented (with Prof. Scheerer), in 1843, mispickel, allanite and gadolinite, from Norway.

Kiamil (His Highness, Pasha).

Presented, in 1903, a fragment of the *Curatash* meteorite.

King^r (Capt. S.).

See JONES (Prof. Thomas Rupert).

Kjerulf (*Prof.* THEODOR). [1825–1888]

Director of the Geological Survey of Norway.

Presented, in 1865, a fragment of the *Ski* meteorite.

Koch (*Berggrath* FRIEDRICH CARL LUDWIG). [1799–1852]

A selection (200 specimens) from his collection of minerals, mainly from the Harz, was purchased in 1897.

Kochibe (*Dr.* TADANORI).

Director of the Geological Survey of Japan.

Presented, in 1900, about 158 representative minerals and rocks from Japan.

Koksharov (*General* NICOLAI IVANOVICH). [1818–1893]

Koksharov was the son of the Director of Mines at Beresovsk, in the Urals, and, following in his father's footsteps, became a mining engineer in the Imperial Service. In 1845, he was appointed professor, and, in 1872, Director of the Mining Institute at St. Petersburg, a post held till his retirement in 1891. His private collection (about 3250 specimens) was purchased in 1865, and the Museum was thereby enriched with an admirable series of Russian, and, in particular, of Siberian minerals, the finest specimens of which are rarely offered for sale beyond the borders of the Russian Empire. The collection had served as material for the valuable series of memoirs in ten volumes, published by General Koksharov under the title of "Materialien zur Mineralogie Russlands" (1853–1891). His position as Director of the Mining Institute at St. Petersburg afforded him exceptional opportunities for the acquisition of fine specimens.

Koulibini (*Prof.*).

Of St. Petersburg.

Presented, in 1877, a fragment of the *Verkhne-Dnieprovsk* meteorite.

Krantz (*Dr.* AUGUST). [1809–1872]

Mineral dealer of Berlin and, after 1850, of Bonn.

A large series of crystals (2624 in number), brought together by him, was purchased in 1859; it contained specimens of very rare minerals, such as euclase and wagnerite, and was rich in series of feldspars, hemimorphite, augite, chrysolite, beryl, phenakite, sapphire and zircon.

Lake Tanganyika Expedition Committee.

Presented, in 1900, a series (50 specimens) of schists, felsites, phonolites, etc., collected by Mr. M. Fergusson in Tropical East Africa.

Lane (*A. L.*).

Presented, in 1903, fine specimens of cerussite from Broken Hill, New South Wales.

La Trobe (*Rev.* BENJAMIN).

A prominent Moravian Minister.

Presented, in 1777, two large, polished slabs of labradorite (showing change of colour on change of incidence of the light), from Nain, Labrador.

Latrobe (*CHARLES JOSEPH*). [1801–1875]

Governor of Victoria.

The "Latrobe" gold nugget, weighing 23 oz. Troy (717 grams), and

well crystallised in cubes, was so called in his honour, having been raised in his presence at McIvor Mount, Victoria, on May 1st, 1853; the nugget was purchased in 1858.

Law (S.).

Presented, in 1843, carnelian, jasper and chalcedony, from India.

Leadbeater (BENJAMIN).

Presented, in 1838, witherites from Northumberland.

Lehmann (GUSTAV).

Presented, in 1874, two large, isolated crystals of parisite from Muso, Colombia.

Leidy (Dr. JOSEPH). [1823-1891]

Presented, in 1876, specimens of corundum and associated minerals from North Carolina and Pennsylvania, and also various other minerals from the United States; and, in 1878, coquimbite, erythrite, etc., from Chili.

Lettsom (WILLIAM GARROW). [?-1887]

Joint author with R. P. Greg (*q.v.*) of a "Manual of the Mineralogy of Great Britain and Ireland," published in 1858.

Presented, in 1846, a group of pale flesh-red rhombohedra of chabazite (acadialite) on the matrix, and a group of brick-red rhombohedra of chabazite with stilbite in a rock-cavity, both from Wasson's Bluff, Bay of Fundy, Nova Scotia; in 1850, two groups of dark-green crystals of epidote on the matrix, from Traversella, Piedmont; and, in 1863, specimens of chalcedonic minerals from Uruguay.

Leuchtenberg (H.I.H. the Duke of). [1843-1891]

President of the Imperial Mineralogical Society of St. Petersburg [1865-1891].

Presented, in 1869, a nugget of platinum, weighing 1350 grains (87.5 grams), from Nijni-Tagilsk, Urals.

Liversidge (ARCHIBALD). [1846-]

Professor of chemistry at the University of Sydney.

Presented, in 1885, thin sections, and, in 1897, a fragment of the *Barratta* meteorite; and, in 1891, a slice of the *Thunda* meteorite.

Loftus (WILLIAM KENNETT). [1821?-1858]

Archæologist and traveller.

Presented, in 1855, limestones, schists and slates, which he had collected in the mountain ranges of western Persia, and also volcanic rocks from Lake Van, etc.

Logan (Sir WILLIAM EDMOND). [1798-1875]

Director of the Geological Survey of Canada [1842-1870].

Presented, in 1856, a fragment of the *Madoc* meteorite.

London Basalt Stone Company, Directors of the.

Presented, in 1899, a column of basalt, 14½ feet (4.4 meters) long, from Rhenish Prussia.

Ludlam (HENRY). [1824-1880]

Henry Ludlam devoted his leisure to mineralogy, and brought together an extremely fine collection, in which were included the collections made

by Charles Hampden Turner and William Nevill; it was bequeathed by him to the Museum of Practical Geology, London. He presented to the British Museum, in 1877, a magnificent group of large, transparent, scalenohedral crystals of Chilian proustite, which, having been protected from the light, have retained both their colour and their transparency; and, in 1879, a large collection (about 600 specimens) of volcanic rocks from various European localities (Auvergne, Vosges, etc.).

Lutschaunig (ALFRED).

Presented, in 1864, a meteoric stone, found in the Desert of Atacama, Chili.

Lyon (Capt. GEORGE FRANCIS, R.N.). [1795-1832]

A suite of specimens of alluvial and other gold, brought together by him during his stay in the principal gold districts of Brazil, was purchased in 1833.

McClounie (J.).

Presented, in 1899, one of the *Zomba* meteoric stones.

McCormick (Deputy Inspector-General ROBERT, R.N.). [1800-1890]

A selection from the rock-specimens collected by him during the Arctic Expedition of 1827, Antarctic Expedition of 1839-1843, and the Franklin Search Expedition of 1852-1853, came to the Museum in 1890 by bequest.

Macdonald (Major C.).

Presented, in 1862, a series of specimens of turquoise from Wadi Maghara, Arabia Petraea.

Maclear (Sir THOMAS). [1794-1879]

Astronomer Royal at the Cape of Good Hope [1833-1870].

Presented, in 1839 and 1863, respectively, specimens of the *Cold Bokkeveld* and *Kaee* meteorites.

Majendie (ASHURST).

Presented, in 1835, diallage, cuprite and other minerals from Cornwall.

Mantell (Dr. GIDEON ALGERNON). [1790-1852]

Geologist.

Presented, in 1834, a very large mass of aluminite from Newhaven, Sussex. A fragment of the *Nanjemoy* meteorite was purchased from him in 1839.

Marks (E. W.).

Presented, in 1854, several crystals of parisite from Muso, Colombia.

Marryat (?).

Presented, in 1819, three specimens of ilvaite from Elba.

Marsham-Townshend (Hon. ROBERT). [1834-]

Presented, in 1877, thirty specimens, mostly from Brazil, including quartz, pyrrhotite and chalybite, from San Juan del Rey mine, Minas Geraes.

Maskelyne (MERVIN HERBERT NEVIL Story-).

See STORY-MASKELYNE (Mervin Herbert Nevil).

Medlicott (HENRY BENEDICT). [1829—]

Director of the Geological Survey of India [1876–1887].

Presented, in 1886, thirty-seven specimens of Indian rocks.

Menzies (ARCHIBALD). [1754–1842]

Presented, in 1800, iron-pyrites with blende, copper-pyrites, pearl-spar calcite and quartz, all crystallised, from Chili.

Merino (MIGUEL).

Astronomer at Madrid.

Presented, in 1896, a fragment of the *Madrid* meteorite.

Mitchell (Sir THOMAS LIVINGSTONE). [1792–1855]

Australian explorer.

Presented, in 1848, a collection (about 50 specimens) of rocks and minerals from northern Australia.

Moll (KARL EHRENBART, *Baron von*). [1760–1838]

From 1790 to 1804 Baron von Moll was Chancellor of the Exchequer of the Electorate of Salzburg. He then retired from public life, and devoted his leisure to scientific pursuits at Munich, and later at Augsburg. His library and natural history collections were purchased in 1815; many minerals of great scarcity and beauty, especially from Salzburg and the Tyrol, were thus added to the collection.

Monte del Aquacata Mining Company.

Presented, in 1872, a large mass of gold-quartz, portion of a rich quartz-lode, from San Rafael, Costa Rica.

Monticelli (TEODORO). [1759–1846]

Monticelli, a benedictine, was for two years [1792–1794] professor of ethics at the University of Naples. The following years, till 1800, were spent in prison, as a result of his participation in the political disturbances of the time. He was appointed professor of chemistry at the University of Naples in 1808. His large collection (upwards of 2000 specimens) of Vesuvian products, both minerals and lavas, etc., was purchased in 1823. The results of a study of these products are given in Monticelli and Covelli's "Prodomo della Mineralogia Vesuviana," 1825. A manuscript list of the specimens, in the handwriting of Covelli, is preserved in the Department. Many of the best specimens of crystallised Vesuvian minerals now in the Museum came as part of the Monticelli collection.

Moreno (*Dr.* FRANCISCO P.).

Director of the Museum of La Plata.

Presented, in 1899, a large polished slab of green marble from La Toma, Argentina, and a fragment of the *Capperr* meteorite.

Moss (MILTON).

Mining engineer, of Cripple Creek, Colorado.

Brought together, during the years 1894–1901, an excellent suite of rare tellurides, including several fine crystals, from Cripple Creek, which were purchased from him.

Müller (*Capt.* WILLIAM). [?–1846]

Presented, in 1826, boracite from Lüneburg.

Murray (*Sir JOHN, K.C.B.*). [1841-]

The collections, obtained by the *Challenger* Expedition of 1873-1876, were presented, in 1890, by the Lords Commissioners of the Admiralty through Sir John Murray.

Nabeshima (NAOTARO).

Of Japan.

Presented, in 1883, the *Ogi* meteorite.

Nares (*Rev. ROBERT*). [1753-1829]

Presented, in 1797, two mamillary masses and a polished slab of malachite from the Urals.

Netherlands, Government of the.

Presented, in 1887, a fragment of the *Djati-Pengilon* meteorite.

Neumayer (*Dr. GEORG BALTHASAR*). [1826-]

Of Hamburg.

Presented, in 1869, a fragment of the *Krähenberg* meteorite.

Nevill (WILLIAM).

Presented in 1862 and 1864, respectively, fragments of the *Perth* and *Agra* meteorites; in 1861, 200 mineral specimens from his collection were purchased from him.

His collection of minerals was acquired by Henry Ludlam (*q.v.*).

New South Wales, Department of Mines and Agriculture.

Presented, in 1903, a small collection of rock-specimens from New South Wales.

Newnes (*Sir GEORGE, Bart.*). [1851-]

Presented, in 1902, the series of rock-collections, obtained by the Antarctic Expedition of the *Southern Cross* under Mr. C. E. Borchgrevink, which he had organised and despatched.

Nicholson (*Prof. HENRY ALLEYNE*). [1844-1899]

Presented, in 1872, various Canadian minerals.

Nicolay (*Rev. CHARLES G.*).

Of Perth, Western Australia.

Presented, in 1885, the *Youndegin* meteorite.

Nicoll (*Dr. H.*).

Collected a series of nepheline-syenites and other rocks from Sierra Leone, which were presented by Earl Bathurst in 1820.

Noja (GIOVANNI CARAFFA, *Duke of*). [1715-1768]

Presented, in 1758, a mocha-stone, set in an enamelled ring.

North Eastern Railway Company, Directors of the.

Presented, in 1881, a fragment of the *Middlesbrough* meteorite.

Northampton (SPENCER JOSHUA ALWYNE, *2nd Marquess of*). [1790-1851]

President of the Royal Society [1838-1848] and Trustee of the British Museum.

Presented, in 1818 (when he was still Earl Compton), melilite and

other Vesuvian minerals; in 1832, hæmatite on lava from Vesuvius; in 1845, a large specimen of beekite from Devonshire; and, in 1850, a fine group of pink crystals of apophyllite from Samson mine, Andreasberg, Harz.

Northumberland (ALGERNON PERCY, 4th Duke of). [1792–1865]

Presented, in 1829, a collection (about 30 specimens) of granites, quartz-felsites, sandstones, etc., from the Sinai Peninsula.

Nuttall (Prof. THOMAS). [1784–1859]

A selection of specimens from his collection, including a fine group of kyanite crystals from Massachusetts, was purchased in 1860.

Oldham (Dr. THOMAS). [1816–1878]

Superintendent of the Geological Survey of India.

Presented, in 1861 and 1863 respectively, fragments of the *Pegu* and *Kusiali* meteorites.

Ouseley (Sir GORE, Bart.). [1770–1844]

Presented, in 1833, a specimen of turquoise from Persia.

Owen (Prof. Sir RICHARD). [1804–1892]

Superintendent of the Natural History Departments of the British Museum [1856–1884].

Presented, in 1857, a specimen of jarrowite.

Parish (Sir WOODBINE, K.C.B.). [1792–?]

Presented, in 1826, the large *Otumpa* meteorite, weighing 1400 lb. (600 kilograms), and, in 1828, a fragment of the *Imilac* meteorite.

Parkinson (JOHN).

Presented, in 1840, a fragment of the *Zacatecas* meteorite.

Parry (Sir WILLIAM EDWARD). [1790–1855]

Collected during the expedition to the Polar regions of 1819–1820 various rock-specimens, which were presented by the Lords Commissioners of the Admiralty in 1821.

Pearce (RICHARD).

Presented specimens at various times; among them, in 1886, copper minerals from Mammoth mine, Utah.

Persia (*Shah of*).

Presented, in 1882, a fragment of the *Veramin* meteorite.

Petiver (JAMES). [1658–1718]

His extensive natural history collections were purchased in 1718 by Sir Hans Sloane (*q.v.*).

Phillips (A. G.).

Presented, in 1897, many thin rock-sections from the collection of his father, J. A. Phillips.

Pilcher and Sons (*Messrs.*).

Presented, in 1851, a mass, weighing 32 lb. (14·5 kilograms), of graphite.

Planta (JOSEPH). [1744-1827]

Principal Librarian of the British Museum [1799-1827].

Presented, in 1807, a crystal of boracite, in gypsum, from Lüneburg, Hanover.

Poushkin (Count APOLLOS DE MOUSSIN).

Included in Hatchett's (*q.v.*) collection, which was purchased in 1799, were many Russian specimens, which he had received from Count Poushkin; a manuscript list of them is preserved in the Department.

Prudhoe (Lord, afterwards 4th Duke of Northumberland).

See NORTHUMBERLAND (Algernon Percy, 4th Duke of).

Raikes (J. M.).

Presented, in 1824, gold with aikinite, in quartz, from Beresovsk, Urals.

Raisin (Dr. CATHERINE ALICE).

Presented, in 1896, a series of granites, sandstones, camptonitic dyke-rocks, etc., from Egypt, collected by Mr. G. F. Scott Elliot, and has published descriptions of several collections of rocks presented to the Museum.

Ridley (HENRY NICHOLAS). [1855-]

Assistant in the Botanical Department of the British Museum [1880-1888].

Presented, in 1887, about 200 specimens of phonolites, basalts, etc., which he had collected in the Island of Fernando Noronha.

Rochon (Abbé ALEXIS MARIE). [1741-1817]

Distinguished as an astronomer and navigator.

Presented, in 1790, atacamite ("copper-sand") from Atacama, Chili.

Rodriguez (Dr. JOSÉ SANTOS).

A large series of leucitic lavas and tuffs from the neighbourhood of Rome, collected by him, was purchased in 1894.

Rose (GUSTAV). [1798-1873]

Professor of mineralogy at the University of Berlin.

Fifty-eight crystals, which had belonged to his private collection, were purchased in 1895.

The British Museum Collection of Minerals was re-arranged (1858-1862) by Mr. Maskelyne according to Rose's crystallo-chemical system.

Royal Society.

The Delta Boring Committee presented in 1897 a series of specimens (with sections) of the deposits of the Nile Delta, obtained during the boring operations at Zagazig undertaken by the Royal Society.

Ruskin (Prof. JOHN). [1819-1900]

Slade professor of Fine Art in the University of Oxford.

Presented, in 1850, two specimens of fluor ("the Coutte rose-fluors") from Switzerland; in 1865, several large specimens, including a polished mass of Iceland spar, harmotome from Strontian, chessylite from Chessy, a long branch of crystallised native copper from Lake Superior, celestite from Sicily; in 1884, about 50 specimens of agate and chalcedony (which, when arranging a case to illustrate the "Forms of Silica," he presented to supplement the specimens in the collection); and, in 1887, the "Colenso" diamond, a large yellowish octahedron, weighing 130 carats (27 grams), and the "Edwardes" ruby (corundum).

Rutley (FRANK). [1842-1904]

Presented, in 1902, collections of rock-specimens (with microscopic sections) from the Malverns, North Wales and Cornwall, illustrating his papers in the *Quart. Journ. Geol. Soc.*

Ryan (SYDNEY).

Presented, in 1899, a collection (over 100 specimens) of gneisses, schists, ferruginous shales, etc., from the Ingwenya Berg and Embabaa district, West Swaziland.

Sabine (Sir EDWARD). [1788-1883]

President of the Royal Society [1861-1871].

Presented, in 1818, amber, graphite, and other minerals from Greenland.

St. Petersburg, Imperial Academy of Sciences.

Presented, in 1776, a fragment of the *Pallas* meteorite.

Samuel (N.).

Presented, in 1903, a series of rock-specimens, which he had collected in Ashantee.

San Francisco, Town Authorities of.

Presented, in 1863, a specimen of the *Tucson* meteorite.

Sanderson (JOHN). [?-1881]

Of Natal.

Presented, in 1878, a fragment of the *Cronstal* meteorite.

Sanderson (J. H.).

Presented, in 1877, a series (about 30 specimens) of basaltic rocks from the neighbourhood of Edinburgh.

Sansoni (Prof. FRANCESCO). [1853-1895]

An extensive collection of crystals of calcite, being part of the material used by him for his memoirs on the crystallography of that species, was purchased in 1895.

Scheerer (Prof. K. J. A. T.). [1813-1875]

See KEILHAU (Prof. B. M.).

Schimper (Dr. WILHELM). [1804-1878]

Collected in the neighbourhood of Adowa and Axum, Abyssinia, a series (about 100 specimens) of schists and slates, and phonolitic rocks containing riebeckite and agirine; the specimens were purchased in 1869.

Schlagintweit (HERMANN [1826-1882], ADOLPH [1829-1857], and ROBERT [1833-1885], VON).

Collected a series of rock-specimens, when on a scientific mission to India and High Asia between the years 1854-1858; the specimens were incorporated in the India Museum, and transferred to the British Museum in 1879.

Schultén (AUGUST BENJAMIN, Baron DE). [1856-]

Lecturer in chemistry at the University of Helsingfors.

Presented, in 1898, a large polished block of orbicular granite from Kangasniemi, Finland.

Seidler (C.).

Presented, in 1885, a very large, simple crystal of staurolite, and, in 1890, a fibrolite hatchet; both from France.

Sharpe (Sir ALFRED, C.B., K.C.M.G.). [1853—]

His Majesty's Commissioner for British Central Africa.

Presented, in 1899, two of the *Zomba* meteoric stones.

Shockley (W. H.).

Presented, in 1898, a series of rock-specimens, collected by him in Mongolia and the Province of Lia Tong, Manchuria; and, in 1901, a series (about 200 specimens) of granites, schists, felsites, andesites, etc., collected by him on the north-east coast of Siberia.

Siam, Royal Department of Mines and Geology.

Presented, in 1897, a series of about 70 small rock-specimens from Siam, collected by Mr. H. Warington Smyth (*q.v.*).

Simmons (RICHARD).

Presented, in 1836, well-crystallised specimens of cerussite, calamine (large green rhombohedra from Chessy), beryl, mimetite, gold, argentite, rutile, barytes, idocrase, apatite, and fluor.

Sloane (Cavaliere).

Presented, in 1860, sloanite, larderellite, caporcianite and other minerals from Italy.

Sloane (Sir HANS, Bart.). [1660–1753]

Secretary [1693–1712], and President [1727–1741], of the Royal Society.

Sir Hans Sloane, Bart., studied medicine at Paris and Montpellier, and at the latter place made the acquaintance of his future friend, William Courten (*q.v.*). In 1687, Sloane sailed to the West Indies as physician to the Governor of Jamaica (the Duke of Albemarle), and during his fifteen months' stay there collected natural history specimens, more especially plants. On his return to London in 1689, he settled in practice in Bloomsbury Square, and was rapidly successful. His natural taste for collecting seems to have been stimulated by Courten, and as early as 1691 Evelyn, in the *Diary*, recorded a visit made to his curiosities. On Courten's death in 1702, Sloane inherited the whole of his valuable collections, and, in 1718, purchased that of Petiver. In 1742, the entire collection was moved to the Manor House, Chelsea, and, in 1753, acquired for the Nation.

Smith (ARMSTRONG).

Presented, in 1891, a small collection of basaltic lavas from Kilauea, including specimens of the lava stalactites described by Prof. E. S. Dana.

Smith (Dr. CHRISTEN). [1785–1816]

Director of the Botanical Gardens of the University of Christiania.

Made (with Mr. Tudor), in 1816, a small collection of gneisses, schists, etc., at the mouth of the Congo; the specimens were presented by the Lords Commissioners of the Admiralty in the same year.

Smyth (HERBERT WARINGTON). [1867—]

Secretary of the Department of Mines at Johannesburg, Transvaal.

Collected in Siam a series of about 70 small rock-specimens, which was presented in 1897 by the Royal Department of Mines and Geology, Siam: presented, in 1898, sapphires and spinels from Siam.

Snow (—).

Presented, in 1811, copalite ("Highgate resin") from Highgate, Middlesex.

South African Museum, Trustees of the.

Presented, in 1874, a fragment of the *Bethany* meteorite.

South Australia, Government of.

Presented, in 1886, a collection (about 400 specimens) of granites, gneisses, schists, etc., from South Australia, including a series of rocks from the Barossa and Echunga goldfields.

Stapff (*Dr.* FRIEDRICH MORITZ). [1836–1895]

Selected a series of specimens from the rocks met with during the boring of the St. Gotthard Tunnel: the series, with geological tables and sections, was purchased in 1881.

Stefani (*Prof.* CARLO DE). [1851–]

Of Florence.

Collected large series (about 200 specimens) of granites, gneisses, schists, limestones, etc., from the island of Corsica, and of granites, gabbros, schists, limestones, etc., from the island of Giglio; the former series was purchased in 1892 and the latter in 1894.

Stokoe (ROBERT).

Presented, in 1838, witherites from Northumberland.

Story-Maskelyne (MERVIN HERBERT NEVIL). [1823–]

Keeper of Minerals in the British Museum [1857–1880], and professor of mineralogy at the University of Oxford [1856–1895].

Presented specimens in various years, including the following:—in 1880, bright crystals of columbite from Standish, Maine, and other minerals; and, in 1887, several fine, large masses of precious opal, in the matrix, from Queensland.

Strachey (*Lieut.-Gen. Sir* RICHARD, *G.C.S.I.*). [1817–]

Made a large collection of schists, slates, granites, etc., from Kumaon and southern Tibet, illustrating the geology of part of the Himalayas; the specimens were incorporated in the India Museum, and transferred to the British Museum in 1879.

Strangford (PERCY CLINTON SYDNEY, *6th Viscount*). [1780–1855]

Presented, in 1827, two specimens of flexible sandstone from Itacoluni Mountain, Minas Geraes, Brazil.

Swan (*Mrs.*).

Presented 979 specimens of variegated clay from London and the vicinity in 1839.

Sweden, Director of the Geological Survey of.

Presented, in 1887, a collection of about 80 typical rock-specimens from Sweden.

Sykes (*Col.* WILLIAM HENRY). [1790–1872]

Collected basalts, etc., from Bombay; the specimens were incorporated with the India Museum, and, in 1879, transferred to the British Museum.

Symes (*Col. MICHAEL*). [1753 ?–1809]

The largest and most remarkable crystal, or parallel growth of crystals, of rubellite, known to exist, was given by the King of Ava to Col. Symes, when the latter was on an Embassy to that country in 1795; it was acquired for the Trustees, in 1810, by the purchase of the Greville collection.

Szabó (*Prof. JÓZSEF*). [1822–1894]

Presented, in 1876, a collection (about 40 specimens) of andesitic rocks from Hungary.

Talmage (*Dr. JAMES EDWARD*).

Professor of geology at the University of Utah, Salt Lake City.

Presented, in 1893, crystals of selenite, of extraordinary size, from Wayne County, Utah.

Tattenall (*Mrs. ANN*).

Bequeathed about 120 mineral specimens, which were acquired by the Trustees in 1848.

Taylor (*JOHN WILLIAM*). [1822–]

Presented, in 1855, Greenland minerals, including fine columbites; and, in 1861, eudialyte, sapphirine and allanite, from Greenland.

Taylor (*JOHN*). [1789 ?–1863]

Mining engineer.

Presented, in 1825, brilliant, greenish-yellow crystals of pyromorphite on the matrix, from Wheal Alfred, Cornwall; and, in 1859, a magnificent group of white and colourless lamellar crystals of cerussite, many of them twinned, from Logylas mine, Aberystwith, Cardiganshire.

Taylor (*W.*).

Of Elgin, N.B.

Presented, in 1895, a fragment of the *Concepcion* meteorite.

Tendron (*FREDERICK*).

Presented, in 1883, a very fine crystal of pyrrhotite from Morro Velho, Minas Geraes, Brazil.

Thomasset (*H. P.*).

Presented, in 1898, a large suite of very delicately crystallised specimens of aragonite from the Sterkfontein caves, Barnett, Transvaal.

Thomson (*TAYLOUR*).

Presented, in 1863, a fragment of the *Vaca Muerta* meteorite.

Tilden (*Dr. JOHN N.*).

Of New York State.

Presented, in 1886, a fragment of the *Jenny's Creek* meteorite.

Trail (*Lady FRANCES*).

Presented, in 1833, worked articles of agate and heliotrope.

Treasury, Lords Commissioners of the.

Presented, in 1876, about 150 specimens of basaltic lavas, etc., from the Island of Rodrigues, which had been collected by Prof. I. Bayley Balfour during the "Transit of Venus" Expedition of 1874–1875.

Trevelyan (*Sir* WALTER CALVERLEY, *Bart.*). [1797–1879]

Presented, in 1826, zeolites, opal, etc., from the Faroe Islands.

Tudor (?).

See SMITH (*Dr.* Christen).

Ulrich (GEORG HEINRICH FRIEDRICH). [1830–1900]

Professor of mining and mineralogy at the University of Otago, Dunedin, New Zealand.

Presented, in 1890, specimens of awaruite (terrestrial nickel-iron) and serpentine, from New Zealand; and, in 1894, a fragment of the *Makariva* meteorite.

Unánue (HIPÓLITO). [1755 (1758?)–1833]

Secretary of the Philosophical Society at Lima.

Presented, in 1814, silver in calcite, from Peru.

United Asbestos Company.

Presented, in 1890, asbestos (a mass of long, white fibres) from Valtellina, Lombardy, Italy.

Vicary (WILLIAM). [1811–1903]

Presented, in 1874, a collection of "Exeter trap" and other volcanic rocks (about 30 specimens) from Devonshire.

Vienna, Imperial Museum of.

Presented, in 1814, a fragment of the *Stannern* meteorite.

Vines (STUART).

See FITZGERALD (Edward Arthur).

Ward (*Rev.* JAMES CLIFTON). [1843–1880]

Presented, in 1877, specimens of volcanic ash, etc., which he had collected in the vicinity of Keswick, Cumberland.

Warth (*Dr.* H.).

Presented, in 1876, crystallised specimens of blödite from the Mayo salt mines, Punjab, India.

Wavell (*Dr.* WILLIAM). [?–1829]

Presented, in 1817, a specimen (from Devonshire) of wavellite, a mineral species which had been named after him.

Webb (PHILIP BARKER). [1793–1854]

Presented, in 1841, about 300 specimens of phonolitic and basaltic lavas, which he had collected in the Canary Islands.

Western Australia, Government of.

Presented, in 1902, a collection of gold tellurides and other gold ores from Western Australia.

Western Australia, Mines of.

Various companies presented, in 1902, gold tellurides and other gold ores from Western Australia.

Widdrington (*Capt.* SAMUEL EDWARD, *R.N.*).

See COOK, afterwards WIDDRINGTON (*Capt.* Samuel Edward, *R.N.*).

Wilkinson (*Sir JOHN GARDNER*). [1797–1875]

Antiquary and archæologist.

Presented, in 1839, a series of Egyptian minerals and ores, and about sixty specimens of schists, serpentines, breccias, etc., from Egypt and Arabia Petraea.

Willcox (*Col. JOSEPH*).

Presented, in 1889, various American minerals: 150 specimens, chiefly American, selected from his collection, were purchased in 1893 from his son.

Williams (*JOHN CHARLES*). [1861–]

550 specimens, chiefly from Cornish mines, selected from the extensive collection of Mr. J. C. Williams, of Caerhays Castle, Cornwall—a collection made by his father and grandfather—were presented by him in 1893. Of these may be specially mentioned:—a very large mass of cerussite, as delicate silky needles, from Pentire Glaze mine, Padstow, Cornwall; and a unique specimen of Cornish spangolite.

Wills (*Rev. J.*).

Missionary in Madagascar.

Presented, in 1889, a large crystal of black tourmaline, with sharp termination, and a collection of rocks, from Madagascar.

Winslow (*E. N.*).

Of Hyannis, Mass., U.S.A.

Presented, in 1876, a fragment of the *Shingle Springs* meteorite.

Wollaston (*Dr. WILLIAM HYDE*). [1766–1828]

Distinguished as chemist and as the inventor of the reflective goniometer.

Presented, in 1815, iridosmine with platinum, gold and magnetite, from the Urals.

Woodward (*BERNARD BARHAM*). [1853–]

Assistant in Charge of the General Library, British Museum (Natural History).

Presented, in 1889, gneisses, schists, granites and diorites, which he had collected in Guernsey.

Woolmer (*SHIRLEY*).

Presented, in 1829, garnet, magnetite and tourmaline, from Haytor, Devonshire.

Wright (*Rev. GEORGE FREDERICK*).

Presented, in 1875, a series of specimens of cassiterite from New England, New South Wales.

L. FLETCHER.

